NOAA LEGISLATIVE INFORMER
December 1997 / Issue #25
Office of Legislative Affairs (202) 482-4981; Brian Wheeler, Director

LEGISLATIVE HAPPENINGS

PRESIDENT SIGNS NOAA $2.0 BILLION APPROPRIATION FOR FY '98; 4 % INCREASE OVER PREVIOUS YEAR

The President on November 26th signed the Commerce, Justice, State, the Judiciary, and Related Agencies Appropriations Bill (Public Law 105-119) . Included in PL 105-119 (HR 2267/HRpt 105-405) is a $2.002 billion Appropriation for NOAA or 4 percent above the FY 1997 Appropriation and 1 percent above the Administration request.

This is the first time that NOAA's total Appropriation has reached the $2 billion mark. **(**This total does not include $7 million in emergency supplemental appropriations to provide emergency disaster assistance pursuant to section 312(a) of the Magnuson-Stevens Fishery Conservation and Management Act for the Bristol Bay and Kuskokwim areas of Alaska.). Also included is $5 million for the Global Learning and Observations to Benefit the Environment program (GLOBE) program

The FY 1998 Appropriation includes significant changes in the account structure for NOAA, through the creation of a new separate account for procurement, acquisition, and construction activities. The "Procurement, Acquisition and Construction" account, while similar to the "Capital Assets Acquisition" or CAA account requested by the Administration does not provide a multi-year Appropriation.

Dr. D. James Baker, NOAA Administrator, in addressing NOAA constituents on December 8th called the FY '98 NOAA budget "the right level of investment to protect the environment and assure economic growth. Investment in our Nation's and the world's environmental health is an investment in economic well-being."

NATIONAL WEATHER SERVICE (NWS)

The Appropriation provided $16 million above the request for the base operations of the National Weather Service (NWS) in response to recommendations contained in the report prepared by Retired Air Force Brig. General Jack Kelly. Total NWS funding is $435.3 million.

Dr. Baker noted that " The Secretary of Commerce and I are committed to implementing the management reforms recommended by the report. We are working with the Department to assess all of the recommendations contained in the report and would like to include the views of the candidate chosen to fill the vacant Assistant Administrator position in this discussion."

"Congress showed its continued support for the modernization of the Weather Service by providing $116.9 million as requested for Advanced Weather Interactive Processing System (AWIPS). This program is the cornerstone of the modernization, and is essential to realize the full benefits of our investments made to date," Dr. Baker stated.

NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE

The Appropriation provides $34 million for the interagency program office to converge the NOAA and Department of Defense (DOD) polar satellite programs. This amount is $17 million less than requested but according to NOAA is sufficient based on revisions to launch dates as the result of the performance of the current series of both the Defense Meteorological Satellite Program (DMSP) and Polar-orbiting Operational Environmental Satellite (POES) satellites.

Included within this amount is a $3 million requirement to test the collection of wind data through ground-based instrumentation similar to that used by satellite systems; and to develop a proposal for the use of such data provided by the private sector into NOAA services and products; and to issue a request for proposals (RFP) to provide the agency with wind data.

NATIONAL MARINE FISHERIES SERVICE (NMFS)

The FY 1998 Appropriation includes a net increase of $24.5 million over the FY 1997 budget for the National Marine Fisheries Service (NMFS), intended to be used where possible to continue to support the President's commitment to restore the health and wealth of America's fisheries and protect species in danger of extinction.

This net increase includes an increase of $4.8 million to continue implementation of the amendments to the Magnuson-Stevens Fishery Conservation and Management Act (PL 104-297). NMFS has identified some 128 discrete activities to implement the amendments. At least a third of these actions require significant policy decisions and extensive public input. national standard guidelines that represent the key principals of fisheries management;

The funding provide for NMFS also includes $8.2 million to develop and implement recovery plans for West coast salmon, steelhead, whales, and sea turtles

There is also included $3.8 million to begin implementation

of the International Dolphin Conservation Program Act (PL 105-42). The new law goes into effect in March 1999, unless the Secretary of Commerce determines on the basis of ongoing and future studies that tuna fishing by encircling dolphins has a significant adverse impact on dolphin stocks.

Of direct importance to NMFS is the $2.1 million of the $15.3 million allowed for Fleet Maintenance and Planning provides for the design effort of a new fisheries research vessel. This new class of vessel is critical to ensure consistency and continuity of time series data collected over the past several decades.

OFFICE OF OCEANIC AND ATMOSPHERIC RESEARCH

The FY 1998 Appropriation shows continued support for NOAA's research efforts by providing a $24.5 million increase over the FY 1997 budget level for the Office of Oceanic and Atmospheric Research (OAR).

As a result of widespread support for NOAA's El Nino forecasting effort, Congress included $4.9 million to establish a funding base for the operation and maintenance of the Tropical Ocean-Global Atmosphere (TOGA) observing system for forecasters and scientists. This system provides essential measurements for skillful forecasts of the El Nino-Southern Oscillation (ENSO) phenomenon.

An increase of $1 million (as requested) provided for the Heath of the Atmosphere Program to contribute to the Nation's first scientific air quality assessment, clarify options for addressing high ozone levels in a variety of rural areas in the Eastern U.S., and complete the early detection monitoring system.

The Congress provided $29 million for Marine Environmental Research, $10.2 million above the request, and including $1.5 million for implementation of the National Invasive Species Act, $1.5 million to continue the Arctic Research initiative, and $2.3 million to implement the tsunami hazard mitigation plan in efforts to reduce risk to the coastal residents and visitors in the vulnerable States of Oregon, Washington, California, Hawaii, and Alaska.

Congress has provided $56 million or $5.2 million above the President's request for The National Sea Grant College Program. Under Sea Grant, aquaculture has made significant progress in developing food and feeds for larval fish and shellfish. The production of inexpensive food for larval stages of fish and shell fish is one of the major impediments to the development of economically viable marine aquaculture industries.

The reinvented National Undersea Research Program (NURP) has been redesigned to meet both Congressional and Administration concerns. It was provided with $15.5 million or $10.1 million more than the Administration request. The new program provides greater autonomy with accountability to the national network of research centers.

NATIONAL OCEAN SERVICE

Overall, The 1998 Appropriation provides $241.7 million for the National Ocean Service (NOS) or about $17 million over the President's request. It reflects continued commitment to the navigation safety programs of and provides $13.9 million to address the survey backlog exclusively for contracting out with the private sector for data acquisition needs. However, no funds were provided for the Administration's Clean Water Initiative. Dr. Baker said: "Polluted run-off is a serious problem - killing fish, causing harmful algal blooms, hypoxia and other problems. It needs to be addressed."

Congress added $3.5 million increase to enable the addition of Texas and Ohio Coastal Management Programs as the 29th and 30th coastal states to join the national coastal management system. NOAA continues to work with Georgia, Indiana and Minnesota in developing coastal management programs.

The National Marine Sanctuaries Program was appropriated $14 million, a $2.4 million increase over current levels. NOAA approved the Florida Keys and Hawaiian Islands National Marine Sanctuaries, after extensive public review and state acceptance of the two management plans. These sanctuaries are critical elements in NOAA's effort under the recently-reauthorized National Marine Sanctuaries Act to protect coastal resources while allowing for multiples uses within the sanctuaries

PROCUREMENT, ACQUISITION AND CONSTRUCTION ACCOUNT

Congress provided $431.7 million for acquisition of modernized weather and satellites systems - compared to a request of $459.3 million. It provided the full request for the Advanced Weather Interactive Processing System (AWIPS). The Congress also fully supported the Administration's request for the Automated Surface Observing System (ASOS), and the current series of Polar and Geostationary Operational Environmental Satellite (GOES) satellites. In addition, funding for GOES follow-on satellite procurement was reduced by $21.7 million based on the extended operation of the current on-orbit satellites.

Also within the Procurement, Acquisition and Construction account, Congress provided $59.9 million for Construction of facilities compared to a request of $44.2 million. Congress provided no funding for NOAA Research and Operations Center to be located at the Goddard Space Flight Center in Greenbelt, MD.

Congress provided $28 million for construction projects that while unrequested are never-the-less important to NOAA, such as $5 million for environmental cleanup in the Pribilof Islands; $2 million for the Honolulu Fisheries Laboratory to come into compliance with the Americans With Disabilities Act and other safety improvements; and $8 million for Alaska facilities construction related to fisheries laboratory requirements. <<*continued on page 3*>>

STATEMENT BY THE PRESIDENT
NOAA HIGHLIGHTS EXCERPTED

"Today I have signed into law H.R. 2267, the "Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 1998."

"This Act provides over $31 billion in discretionary budget authority for vital law enforcement, international affairs, economic development, and environmental programs....

"**I am pleased with the $4.3 billion in funding for the Department of Commerce, and am grateful that funds for Global Learning and Observations to Benefit the Environment program (GLOBE) program were restored in conference. GLOBE was developed to increase our understanding of the Earth, and has forged partnerships with over 2,500 U.S. schools and 35 other countries, involving thousands of students across the United States and worldwide.**"

WILLIAM J. CLINTON

THE WHITE HOUSE,

November 26, 1997.

<<*continued from page 2*>>

Senate Commerce, Justice, State Appropriations Subcommittee Chairman Sen. Judd Gregg (R-NH) on November 13th on the Senate floor said the bill " significantly expands our efforts in the area of NOAA activities. This is one of our premier national treasures in the area of research and technology, the National Oceanic and Atmospheric Administration. It is an organization which has cutting-edge knowledge in a variety of areas, but especially in the prediction of our weather. We aggressively pursue the expansion of our efforts in weather research and information areas.

Ranking Subcommittee Democrat Sen. Ernest Hollings (D-SC) said "in the Commerce, Justice, and State appropriations bill we fund programs ranging from the FBI to our State Department embassies overseas, to fisheries research and the National Weather Service, to the Supreme Court and the Federal Communications Commission.

"The bill funded the largest account in the Department of Commerce, NOAA, at $2 billion, slightly below the higher Senate number. This includes $241 million for the National Ocean Service, $346 million for the National Marine Fisheries Service, $277 million for Oceanic and Atmospheric Research activities, and $520 million for the National Weather Service. One thing NOAA isn't lacking is in the number of programs it funds. To mention a few, it should be noted that we've provided NOAA with $3.5 million for *Pfiesteria* and algal bloom research, a new problem that we became all to aware of over the last few months here on the East Coast. We also gave the National Ocean Service $44 million for mapping and charting so it can meet its long-term mission requirements to examine ocean activities. The popular Sea Grant program has been continued at $56 million, funds have been allocated to study that omnipresent El Nino, and continued support is given to our National Weather satellites.

"I am especially pleased that we have included $1 million for our new Ocean Policy Commission, the first serious look at our ocean policy and NOAA since the Stratton Commission in the late 1960's. I've talked with Dr. Baker at NOAA, Admiral Watkins, and Dr. Ballard-and we all believe that it is time to reinvigorate our ocean programs and put the "O back in NOAA." You know, we all spend so much time looking to space and a little mechanical robot on Mars, Yet 75% of our planet is ocean, and our exploration of it is woefully lacking."

On the House floor, Rep. Ralph Regula (R-OH), a member of the Commerce, Justice, State Appropriations Subcommittee, said "1998 is the International Year of the Ocean, and we have not paid enough attention to the ocean in terms of its impact on human life. One of the exciting things provided for in here, subsidies, $1.5 million for the Jason Foundation for Education. What the Jason Foundation will do is translate underwater research into the Internet, which means that school students and adults around the world will be able to interact with these researchers and learn more about our oceans and about what is being produced by the research that is taking place, in large part because it is the Year of the Ocean.

"This is an exciting concept. I think we barely scratch the surface. What it means is that when it comes to fruition, that students will be able to interact with people at the National Gallery, at the Smithsonian, at the Kennedy Center, at colleges throughout the United States. I saw this in action in my district where the Jason Foundation had a biologist at Yosemite talking about terminals, and the students in Wooster, Ohio could ask questions of this biologist and he could respond. It really worked out well, and it is an exciting concept. It is part of this bill.

Also, commenting on the final NOAA FY '98 buget agreement was Rep. Connie Morella (R-MD), Chair of the Science Subcommittee on Technology, who said " I am pleased with the increase in funding for the National Oceanic and Atmosphere Administration-about $150 million more than the House bill."

SENATE CONFIRMS ASSISTANT SECRETARY TERRY GARCIA ON NOVEMBER 8TH

The Senate on November 8, 1997 confirmed the appointment of Terry Garcia as Assistant Secretary for Oceans and Atmosphere. Mr. Garcia has been Acting in that position since last November 15, 1996 and previously served as NOAA's General Counsel. His confirmation hearing before the Senate Commerce, Science and Transportation Committee (Chairman John McCain, R-AZ) was held on October 7th. The Committee reported out the nomination on November 4th. Mr. Garcia was sworn in by Secretary of Commerce William Daley on November 12, 1997.

SENATE PASSES LEGISLATION REAUTHORIZING NATIONAL SEA GRANT PROGRAM

The Senate, under Unanimous Consent, on November 13th passed S 927, the National Sea Grant College Program Reauthorization Act of 1997. The bill will now go to the House where its fate is uncertain because of the presence of opposition to a provision on *Pfesteria* research.

S 927, as passed by the Senate, reauthorizes the Sea Grant program five years (through FY 2002) as follows: FY 98 -- $55.4 million; FY 99 -- $56.5 million; FY 00 -- $57.6 million; FY 01 -- $58.8 million; and FY 02 -- $59.9 million

There are several earmarks in the legislation authorizing funding as follows:

--up to $2.8 million for research on zebra mussels; up to $3 million for research on oyster disease and oyster-related human health risks;

--up to $5 million for research on *Pfiesteria* and other harmful algal blooms

The bill also includes the Administrative Law Judge (ALJ) language that NOAA requested to continue the practice of using the US Coast Guard Administrative Law Judges to hear NOAA-related cases that require an ALJ. NOAA believes that this action will facilitate the enforcement process, improving the timeliness of hearings and reducing travel time and expenses for NOAA Fisheries.

THE PRESIDENT SIGNS INTERIOR APPROPRIATIONS BILL DESIGNATING COMMERCE SECRETARY TO APPROVE ALASKAN MARINE RESEARCH GRANTS

The President on November 14th signed the FY '98 Interior Appropriations bill (PL 105-83), including an amendment offered by Sen. Ted Stevens (R-AK) that would provide for the disposition of $800 million in court-ordered Alaskan oil lease revenue into a new fund called the " National Parks and Environmental Improvement Fund." The amendment provides 20 percent of the annual interest from the Fund is to be allocated for marine research.

The Stevens amendment would establish a North Pacific Research Board that would set marine research priorities and recommend grants to tackle those priorities. The Secretary of Commerce and Alaska Department of Fish and Game, or their designees, would serve as cochairs of the Board. The Secretary of Commerce would approve or disapprove the Board's grant recommendations. The legislation directs that the Secretary provide grants to Federal, State, private or foreign organizations or individuals to conduct research activities on or relating to the fisheries or marine ecosystems in the north Pacific Ocean, Bering Sea, and Arctic Ocean (including any lesser related bodies of water). The amendment gives the Board very broad discretion in setting the priorities for the research grants. The Board is to include representatives from the State Department, Interior, the Coast Guard, Office of Naval Research, the North Pacific Fishery Management Council, the Arctic Research Commission, Oil Spill Recovery Institute, and the Alaska SeaLife Center. Other Members would be nominated by the Governors of Alaska (5), Washington (3), and Oregon (1) and formally appointed by the Secretary of Commerce.

THE PRESIDENT SIGNS ATLANTIC STRIPED BASS CONSERVATION BILL WITH AMENDMENT HELPFUL TO NOAA

The President on December 16th signed the Atlantic Striped Bass Conservation Act Amendments of 1997 (PL 105-146)

The Senate on November 10th by Unanimous Consent had cleared the bill, HR 1658. The Senate Environment and Public Works Committee (Chairman John Chafee, R-RI) on October 29th marked up and favorably reported out the bill. The Senate Commerce, Science, and Transportation Committee (Chairman John McCain, R-AZ) on October 8th marked up and reported it out by unanimous voice vote. HR 1658 passed the House on July 8th by a vote of 399-8. The Striped Bass Act has bipartisan support and is credited, along with 15 years of careful management, for being successful in recovering striped bass to pre-decline levels. The reauthorization bill authorizes $800,000 to the Secretary of Commerce, and $250,000 for the Secretary of Interior for the management of and research on striped bass. The Environment Committee adopted one amendment which restores the Department of Interior's Fish and Wildlife Service (FWS) enforcement activities for striped bass. The Commerce Committee had taken out this provision, to the dismay of the FWS and NOAA. NOAA is very pleased that the provision was reinstated because FWS helps the National Marine Fisheries Services significantly out on the open water.

At its markup, an amendment offered by Oceans and Fisheries Subcommittee Chairman Sen. Olympia Snowe (R-ME) and adopted at the Commerce Subcommittee markup addressed 1) a new socio-economic study of the benefits of the Atlantic striped bass resource, and 2) Exclusive Economic Zone (EEZ) regulations promulgated by the Secretary of Commerce.

HOUSE REPORTS AMENDED OCEANS RESOLUTION URGING FEDERAL INTERAGENCY OCEANOGRAPHIC AND MARINE RESEARCH COOPERATION

The House on November 13th passed by Unanimous Consent HCon Res 131 marking Congressional recognition of 1998 as the International Year of the Ocean. The amended resolution had been introduced by Reps. James Saxton (R-NJ) and Neil Abercrombie (D-HI), Chairman and Ranking Democrat respectively of the Fisheries, Wildlife and Oceans Subcommittee of House Resources. It was reported out of the Resources Committee on September 17th.

The amended resolution urges federal agencies to "identify opportunities to streamline, better direct, and increase interagency cooperation in oceanographic research and marine resource management policies and programs and...develop scientific, educational, and resource management programs which will advance the exploration of the ocean and the sustainable use of ocean resources."

The resolution was amended to reference that the ocean is critical to the national security and highlight the work of the Stratton Commission, which over 30 years ago recommended what is now known as NOAA.

The resolution specifically mentions NOAA in connection with 1998, the United Nations declared International Year of the Ocean. *(Report on Under Secretary for Oceans and Atmosphere Dr. D. James Baker October 30th testimony before the Subcommittee*

FOR DETAILED INFORMATION ON NOAA LEGISLATIVE ISSUES, TESTIMONY, RECORD STATEMENTS, AND ADMINISTRATION POSITIONS BOOKMARK: *HTTP://WWW.NOAA.GOV/NOAA-OLA*

ADMINISTRATION ENDORSES ENDANGERED SPECIES ACT LEGISLATION AS IT IS REPORTED BY THE SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE; AMENDED TO INCLUDE A MODEL CONSERVATION PLAN SUPPORTED BY NOAA

On September 30th, the Senate Environment and Public Works Committee (Chairman, John Chafee, R-RI) marked up and reported S 1180, the Committee's bipartisan bill to reauthorize the Endangered Species Act (ESA). The committee vote to approve the bill (S1180) was a bipartisan 14-3. Sens. Craig Thomas (R-WY) and Wayne Allard (R-CO) voted no because they said the bill did not provide enough protection of property and water rights. Sen. Barbara Boxer (D-CA) voted no and said that she would try later to improve species recovery plans.

A number of amendments were proposed and approved. Sen. Ron Wyden (D-OR) presented an amendment to create "state conservation plans" (the coho Oregon Plan model). There were some amendments proposed on subjects such as water rights, property rights, and section 7 consultation requirements; but these were withdrawn at the markup hearing. NOAA expects some of these to be presented again when the bill goes to the full Senate floor.

The environmental organizations Environmental Defense Fund, World Wildlife Fund, Izaac Walton League, and Center for Marine Conservation withdrew their support of the bill on September 29th because of a lack of commitment for appropriate funding levels for landowner incentives.

The Administration conditionally supports the bill pending adequate spending authorization as well as other concerns. On September 23rd, Administration officials Jamie Rappaport Clark, Director of the U.S. Fish and Wildlife Service, and Terry Garcia, Acting Deputy Assistant Secretary for Oceans and Atmosphere, testified before the Committee and identified several technical changes that would have to be made before the Administration could support the bill. The Committee and the Administration did work out those changes.

The ESA reauthorization has been a very intense process, but it has been beneficial for the National Marine Fisheries Service (NMFS) and NOAA to participate in it. Acting Assistant Secretary for Oceans and Atmosphere Terry Garcia's primary concern continues to be that without f ull funding appropriated to implement the bill, the Administration will not be able to meet its goal of recovering listed species.

Jamie Rappaport Clark, director of the U.S. Fish and Wildlife Service, said that the Clinton administration supports the bill. Ms.Clark made the announcement after the committee adopted a series of minor amendments that the White House favored. "I will certainly report that the Administration supports this bill," Ms.Clark said.

REP. DAVID SKAGGS, FRIEND OF NOAA'S ENVIRONMENTAL LABS, ANNOUNCES RETIREMENT AT END OF 105TH CONGRESS

Rep. David E. Skaggs, D-CO, announced on October 4th that he will leave the House at the end of the 105th Congress. Rep. Skaggs, elected to represent the 2nd District in Boulder in 1986, was expected to challenge Sen. Ben Nighthorse Campbell (R-CO), next year. Rep. Skaggs is the only member of the Commerce-Justice-State Appropriations Subcommittee with a significant NOAA presence in his Congressional District: The Boulder Environmental Research Laboratories. Through the years, Rep. Skaggs has proven to be an effective advocate for NOAA's work.

CONGRESSIONAL COURTESY VISITS BEGIN FOR DESIGNATED NOAA ACTING DEPUTY UNDER SECRETARY

Congressional courtesy visits began on October 16th with key authorizing committee staff members for Dr. William O. Mehuron, who was designed on October 8th as the Acting Deputy Under Secretary for Oceans and Atmosphere. Dr. Mehuron was named to the position by Dr. D. James Baker, Under Secretary for Oceans and Atmosphere, to replace Diana Josephson, who left NOAA on September 30th. Dr. Mehuron retains his position as Director, Systems Acquisition Office (SAO). As SAO director, he has been responsible for the development and acquisition of environmental satellites (GOES and Polar) weather satellites (NEXRAD), sensor systems, ships and aircraft, and weather information system (AWIPS). Dr. Baker in making the announcement said that Dr. Mehuron "brings to the Acting Deputy Under Secretary position his extensive experience in senior level positions in the Federal Government and the private sector."

PRESIDENT SIGNS DEFENSE AUTHORIZATION ACT RESTRUCTURING OCEAN PARTNERSHIP PROGRAM

The President on November 18th signed the FY '98 Defense Authorization Act (PL 105-85) which has restructured the National Oceanographic Partnership Program. The Partnership is headed by the Navy and includes NOAA is the lead participating federal agenc. NOAA strongly supports the Partnership. The new law amends the Program to provide for an Ocean Research Advisory Panel. One of the duties of the 10-18 member panel is to advise the Partnership "on matters relating to national oceanographic data requirements." Members are to be drawn from academia, ocean industries, State governments, marine science, marine policy, and the National Academy of Engineering and the National Academcy of Sciences.The Secretary of the Navy is directed to provide financial support for the Advisory Panel, but no dollar amount was established.

There were alsoseveral items affecting the NOAA Corps, including:

--Eliminating limitations on the amount of separation pay;

--Permitting reimbursement for adoption expenses;

--Providing dental insurance coverage for NOAA Corps retirees.

THE SENATE PASSES OCEANS STUDY LEGISLATION BY UNANIMOUS CONSENT

The Oceans Act of 1997 (S 1213), cleared the Senate by Unanimous Consent on November 13th. The bill, introduced by Sen. Ernest Hollings (D-SC), establishes an interagency Council to coordinate domestic ocean policy issues. The bill is intended to highlight the great importance of oceans to the Nation. Next year is the International Year of the Ocean. The bill would require the President to appoint a Council Chairman and report to the Congress on ocean and coastal activities. A 16-member Commission of State and local government, industry, academic and public interest representatives would submit a report on ocean policy to the President through the Council. The Commission would cease to exist 30 days after submitting a final report. The Council would cease to exist one year after receiving the Commission's report. A companion bill, HR 2547 introduced in the House by Rep. Sam Farr (D-CA) will likely be taken up by the Resources Committee.

Sen. Ernest Hollings (D-SC), Ranking Commerce Committee Democrat, said : "Oceans and coasts face pressures today that the authors of the 1966 Act could not have foreseen. Today, over 50 percent of the U.S. population lives in coastal areas which account for less than 10 percent of our land area. By the year 2010, 127 million people, an estimated 60 percent of Americans, will live along the coast. Greater understanding of ocean and coastal ecosystems and improved management are essential to maintain healthy coasts and to prepare for and protect communities from natural hazards like hurricanes.

"We need to do a better job of managing and using marine resources as demonstrated by fish kills, oil spills, the invasion of zebra mussels, and the death of thousands of marine animals from marine plastic debris. We have fallen short in defending our shores and waters. In recent years, New England has struggled with the collapse of their traditional cod, haddock, and flounder. In other regions, overfished stocks include sharks, swordfish, bluefin tuna, salmon, red snapper, grouper, and weakfish. Restoring fisheries could add an estimated $2.9 billion to the economy each year. However, we are allowing about 8,000 hectares of coastal wetlands, important fish habitat, to disappear each year. Louisiana alone has lost 200,000 hectares of wetlands since the mid 1950's.

"Environmental threats to the oceans are growing increasingly complex. This past summer, local newspapers reported daily on *Pfiesteria*, the tiny killer cell wreaking havoc in the Che Chesapeake Bay and North Carolina...."

The Ranking Commerce Committee Democrat said that "the changes made by the Snowe-Hollings substitute focus primarily on addressing concerns expressed regarding the establishment of the Council. Over the past two weeks, the National Security Council and the Department of Commerce have worked under Secretary Daley's able leadership to pull together the views of the numerous Federal entities involved in ocean and coastal activities. The results of that effort are reflected in the amendment, and I am including a letter from Secretary Daley expressing the administration's support for S1213 following my statement. At Sen. Chaffees request, we also have agreed to sunset the Council one year after the Commission completes its report. As we have discussed with both the administration and Senator Chaffee, the purpose of the Council is to ensure coordinated input by Federal agencies and departments in the development and implementation of a national ocean and coastal policy...."

Sen. John Chafee (R-RI), Chairman of the Senate Environment and Public Works Committee, said "The Oceans Act of 1997 is a significant bill. Its 1966 predecessor, the Marine Resources and Engineering Development Act, was one of the seminal developments in environmental law. The act created the Commission on Marine Science, Engineering, and Resources, better known as the Stratton Commission." The Stratton Commission's report, "Our Nation and the Sea" was delivered in 1969 and, among its many important recommendations, led directly to the creation of NOAA in 1970.

"I would note that two distinguished Rhode Islanders played leading roles in the Stratton Commission. University of Rhode Island Professor Emeritus John A. Knauss, then the Dean of the University of Rhode Island's Graduate School of Oceanography, was a Commission member and chaired the panel on Environmental Monitoring and on Management and Development of the Coastal Zone(and former NOAA Administrator). Professor Emeritus Lewis Alexander of the University of Rhode Island, who has had a distinguished career in government and academia, was the Commission's Deputy Director. I expect that the Rhode Islanders will play key roles in the new Stratton Commission.

"The value of our oceans and coastal areas cannot be underestimated. More than half of the United States population lives in or near a coastal area. The commercial fishing industry alone, which depends on these areas," contributes $21 billion dollars per year to the national economy. "Moreover, oceans are the lifeblood of the world. The health of our marine resources is intertwined with that of ecosystems throughout the world."

SENATE ENVIRONMENT COMMITTEE REPORTS AMENDED *PFESTERIA* RESEARCH BILL; SEN. SNOWE INTRODUCES HARMFUL ALGAL BLOOM BILL

The Senate Environment and Public Works Committee (Chairman John Chafee (R-RI) on October 29th reported S 1219/SRpt 105-132, the *Pfesteria* Research Act of 1997 introduced on September 25th by Sen. Lauch Faircloth (R-NC). The bill was spurred in large part by an outbreak of a toxic algae, *Pfiesteria piscicida*, that killed fish and sickened people in North Carolina and in the Chesapeake Bay areas of Maryland and Virginia.

The original bill would have provided grants to specific universities, including North Carolina State University, the University of Maryland and the Virginia Institute of Marine Science at the College of William and Mary. But the committee approved, by voice vote, an amendment by Chairman Chafee that eliminated this language, allowing federal agencies including the National Marine Fisheries Services to determine which universities should receive grants. Other agencies evaluating research applications include the Environmental Protection Agency, the National Institute of Environmental Health Sciences and the Centers for Disease Control and Prevention, and Ag-

riculture. The bill authorizes $12 million over the next two fiscal years for *Pfesteria* related research. Counterpart legislation (HR 2565) was introduced in the House by Rep. Walter Jones (R-NC).

On November 8th, Sen. Olympia Snowe (R-ME) introduced S 1480, the Harmful Algal Bloom Research and Control Act of 1997. The bill rprovides specific authorization for the program known as the Ecology and Oceanography of Harmful Algal Blooms project or ECOHAB. The bill would authorize $10.5 million for FY "98-00 and for each year $5 million for NOAA to upgrade its research lab capabilities to study the problem; $3 million annually for education and extension services through the Sea Grant colleges; $5.5 million annually to help detect harmful algal blooms early; and $8 million annually to help States control blooms.

Sen. Snowe said: "...*Pfesteria* is actually just one example of a large phenomenon-Harmful algal blooms...these damaging outbreaks of often toxic algae affect every U.S. coastal State and terrirtory...on Georges Bank" they cause $3-5 million in annual damages.

HOUSE RESOURCES SUBCOMMITTEE AMENDS NATIONAL FISH AND WILDLIFE FOUNDATION REAUTHORIZATION AND REPORTS BILL TO FULL COMMITTEE

The House Resources Subcommittee on Fisheries Conservation, Wildlife and Oceans (Chairman James Saxton, R-NJ) on October 23rd by voice vote reported an amended version of HR 2376, the National Fish and Wildlife Foundation Establishment Act Amendments of 1997. The *en bloc* Managers amendment offered by Chairman Saxton includes a NOAA request to designate the NOAA Administrator as an *ex officio* member of the Foundation Board replacing the current provision providing *ex officio* status for the Assistant Administrator for Fisheries. The amendment also reduces the current three year authorization for the Foundation to two years, ending September 30, 2000. The amendment also prohibits Foundation grantees from using federal funds for lobbying or litigation.

NOAA Deputy Assistant Secretary Sally Yozell on September 25th provided the Subcommittee with NOAA's views concerning the legislation and described the agency's collaborative relationship with the Foundation. In her written remarks, Ms. Yozell said: "NOAA believes the Foundation is a unique and powerful tool and strongly supports the Foundation's reauthorization." NOAA, she explained, allocated $2.1 million in FY '96 to begin working closely with the Foundation to develop public-private partnerships in 22 different project areas—which has been successfully matched with $1.5 million in private funds. Projects included restoring habitat for Pacific and Atlantic salmon, training graduate students to help control nonindigenous species introductions, assessing options for managing harmful algal blooms, and improving local-level monitoring and management of coral reefs.

NOAA HONORS EXCELLENCE IN COASTAL AND OCEAN MANAGEMENT AT HILL CEREMONY

Dr. D. James Baker, Under Secretary for Oceans and Atmosphere and NOAA Administrator and Rep. Walter B. Jones (Jr.) (R-NC) presided over the Walter B. Jones Memorial and NOAA Excellence Awards for Coastal and Ocean Resource Management at a breakfast ceremony and reception on October 22nd . The awards program named after the late Chairman of the former House Merchant Marine and Fisheries Committee and father of the North Carolina Republican Representative present on the dais. It honors excellence in unique coastal and ocean resource management programs, as well as in public and private endeavors to conserve America's coasts. Seventeen award recipients from across the country were recognized for their outstanding contributions. Several House members attended the ceremony, including: Rep. Jim Saxton (R-NJ), Chairman of the Fisheries Conservation, Wildlife and Oceans Subcommittee; Rep. Howard Coble (R-NC); Del. Donna Christian Green (D-VI); Rep. Gary Ackerman (D-NY); Rep. Bob Etheridge (D-NC); Rep. Frank Pallone (D-NJ); Rep. Frank LoBiondo (R-NJ) and Rep. Sam Farr (D-CA). Other members of Congress, notably Sen. Judd Gregg (R-NH), Chairman of the Commerce-Justice-State Appropriations Subcommittee; Sen. Patty Murray (D-WA); Rep. Nancy Pelosi (D-CA); Rep. John Mica (R-FL) and Rep. Peter DeFazio (D-OR), sent staff to congratulate the award recipients.

<<*For detailed account see pp 23-24*>>

HOUSE AND SENATE PASS AMENDED CORAL REEF CONSERVATION AND PROTECTION RESOLUTION; BILL ESTABLISHING CORAL REEF FUND ALSO CLEARS HOUSE

The House on October 21st by Unanimous Consent repassed HConRes 8, expressing the sense of Congress to encourage support for coral reef conservation and protection, completing Congressional action on the measure. The House in April had passed the Resolution, but because it was amended in the Senate, it had to be repassed by the House because of Senate changes to the original resolution. The Senate on October 9th amended HConRes 8 and then passed it under Unanimous Consent. Concurrent Resolutions do not have to be signed by the President. The House had to repass the bill because it was amended by the Senate to include a provision focusing on destructive fishing practices in and around coral reefs. The amendment addresses threats to coral reefs arising from destructive fishing practices including the use of cyanide, other poisons, surfactants, and explosives. Scientists estimate that 10 percent of the world's reefs have been degraded beyond recovery, a number which is expected to rise to 30 percent within the next 10 to 20 years if present trends continue.

Sen. Daniel Inouye (D-HI), the primary Senate supporter of the Resolution, stated on the Senate floor on October 9th that "there is growing concern over the worldwide degradation of coral reefs. While coral reefs can be thousands of years old, corals grow slowly and are easily damaged.

HOUSE PASSES CORAL REEFS BILL ON CLOSING DAY OF FIRST SESSION OF 105TH CONGRESS

The House on November 13th by Unanimous Consent cleared HR 2233, the Coral Reef Conservation Act of 1997. The bill was introduced on July 23rd and would establish a coral reef conservation assistance program with a dedicated coral reef conservation fund in the Treasury to allow the Secretary of Commerce to

provide financial assistance grants for projects that promote the conservation, protection, assessment, research and management of coral reef ecosystems and coral reef resources. The bill authorizes appropriations of $1 million for the next five years. Also, the bill would establish a formal mechanism for collecting and allocating monetary donations from the private sector to be used in coral reef conservation projects.

SENATE AUTHORIZES UP TO $10 MILLION TO SUPPORT CREATION OF NATIONAL AGRICULTURAL WEATHER INFORMATION SYSTEM; TRANSFERS PRIVATE AQUACULTURE OVERSIGHT TO USDA: HOUSE PASSED BILL SILENT ON BOTH MEASURES--CONFERENCE COMMITTEE LIKELY

The Senate on October 29th cleared S 1150, the Agricultural Research, Extension, and Education Reform Act of 1997. The bill was amended on the Senate floor to include a provision authorizing the Agricultural Department (USDA) to provide up to $10 million over the next five fiscal years to assist USDA in the creation of a National Agricultural Weather Information System. The House by Unanimous Consent on November 13th passed HR 2534, the Agricultural Research, Extension, and Education Reauthorization Act of 1997 after a section on agricultural weather opposed by NOAA as redundant to National Weather Service (NWS) operations was removed.

The Agricultural Weather Service, according to the Senate-passed bill, is broad ranging including support for the collection of real time weather data to training private sector forecasters, to making competitive grants to agricultural weather research institutions.

S 1150 also includes a provision that would designate the Agricultural Department (USDA) as the lead government agency in coordinating support for America's growing farm and marine based aquaculture. A similar provision was slatted to be inserted in the House counterpart bill (HR 2534), but was withdrawn after jurisdictional complaints from the House Resources Committee. The Senate bill even goes so far as to direct the Secretaries of Commerce and Interior to appoint liaison officers to conduct a unified federal aquaculture program, headed up by the Secretary of Agriculture. *Congresional Quarterly* reports that a House-Senate Conference Committee is likely to be appointed during the Second Session to resolve differences between the two bills. It is believed unlikely that the aquaculture provision will become law because the aquaculture title was withdrawn from the House bill and because the Administration is now working on draft legislation that would clarify the aquaculture role of all three agencies. Further, the Administration is expected to oppose the Agriculture Weather Service provision because privatizing of specialized agricultural forecasts has been both a National Performance Review and Congressional priority and other elements of the provision duplicate efforts ongoing in NOAA.

ENERGY AND WATER FY '98 APPROPRIATIONS BILL INCLUDES $85 MILLION FOR CALIFORNIA BAY-DELTA ECOSYSTEM RESTORATION PROGRAM; OTHER AREAS OF NOAA INTEREST ALSO FUNDED

The Energy and Water Development Appropriations Bill for Fiscal Year 1998 (PL 105-62) includes $85 million for the San Francisco Bay/Sacramento-San Joaquin Delta Ecosystem Restoration program. The bill was signed into law by the President on November 13th (PL 105-62). NOAA is a major participant in the program being developed by a State and Federal partnership (CALFED). Under the terms of the House Report (HRpt 105-190) the funds may be transferred to participating federal agencies, besides Interior's Bureau of Reclamation.

Also of interest to NOAA are provisions to provide:

--$95 million for the Columbia River Fish Mitigation program in Washington State, Oregon, and Idaho;

--A report from the Northwest Power Planning Council to conduct a review of the major fish mitigation capital construction activities proposed for implementation at the Federal dams in the Columbia River Basin. The review is to include those dams called for in the 1995 Biological Opinion of the National Marine Fisheries Service;

--$2 million for the Corps of Engineers to develop zebra mussel control strategies (SRpt 105-44 said the Senate Subcommittee was informed of the need for Great Lakes and Lake Champlain, VT research);

--HRpt 105-190 provides $500,000 for Corps to design and construct an environmental dispersal barrier in the Chicago Sanitary and Ship Canal to prevent the spread of exotic species between the Great Lakes and the Mississippi River ecosystems.

VA/HUD FY '98 APPROPRIATION BILL ASKS EPA TO COOPERATE WITH NOAA ON PARTICULATE MATTER RESEARCH; FEMA URGED TO WORK WITH NOAA ON EL NINO PLANNING

The Department of Veterans Affairs and Housing and Urban Development, and Independent Agencies FY '98 Appropriations bill has several items of direct interest to NOAA. The bill (PL 105-65) signed by the President on October 27th. It includes provisions which:

--Provides $49.6 million to the Environment Protection Agency (EPA) to contract with the National Academy of Sciences (NAS) to conduct particulate matter research. The conferees, in turn, directed NAS to develop a research plan after consultation and comprehensive discussions with NOAA and nine other public and private organizations. "The conferees note that this may be the only realistic opportunity to enlist the support of both the public and private sectors to maximize the use of science so as to better determine the answers that will some day guide future regulatory actions regarding particulate matter."

--Encourages the Federal Emergency Management Agency (FEMA) to work with NOAA and four other federal agencies "to utilize El Nino prediction data for disaster planning and

mitigation during Fiscal Year 1998 and explore opportunities to expand the use of this new predictive capability for long-term mitigation planning.

--$1 million for the National Estuary Program, including $400,000 for Barnegat Bay. The Conferees noted their support for the full budget request for EPA's South Florida/Everglades initiative.

--$400,000 for the EPA Maui algal bloom project.

--$250,000 for design for a non-indigenous species dispersal barrier in the Chicago Sanitary and Ship Canal.

--$1,500,000 to support external research on *Pfiesteria*. The conferees are concerned about the recent rash of fish killings and human sickness due to a marine biotoxic outbreak labeled *Pfiesteria*, in east coast waterways. In complementing current local and state efforts, the conferees direct a national research program that would evaluate competitive, peer-reviewed proposals to understand the causes, mechanisms, and health and environmental effects of *Pfiesteria*. Additional funding is appropriated in the environmental programs and management account.

--$1,000,000 to establish the Center for Estuarine and Coastal Ocean Environmental Research to coordinate and further ongoing coastal and environmental research being conducted at the University of South Alabama

DEFENSE FY '98 APPROPRIATIONS BILL DIRECTS AIR FORCE RESERVE TO CONTINUE "HURRICANE HUNTERS" FLIGHTS

The Fiscal Year 1998 Defense Appropriations bill includes report language inserted by the House prohibiting the Air Force Reserves from reducing or disestablishing the operation of the 53rd Weather Reconnaissance Squadron (Hurricane Hunters). The bill (PL 105-56) was signed into law by the President on October 7th. The House Report language which becomes part of the bill said "The Committee continues to strongly believe that the weather reconnaissance mission is critical to the protection of Defense installations along the east and Gulf coats of the United States." The House Appropriations Subcommittee directed the Air Force to provide a minimum of 3,000 flying hours to perform tropical cyclone and winter storm reconnaissance missions. The Committee also provided an additional $1 million for squadron maintenance. It also praised the Air Force for agreeing to include a fully equipped augmented navigator crew station to provide an adequate "margin of safety in the unique and dangerous hurricane reconnaissance missions that range from tropical storms to category 5 hurricanes which have winds in excess of 320 kilometers per hour."

The Conferees also provided $16 million for a Navy oceanographic ship program. The Senate had recommended $73 mil noting "the inability of the current Navy fleet to meet oceanographic survey requirements." The funds had not been requested by the Administration.

In addition:

--The National Oceanography Partnership Program, in which NOAA is leading civilian federal agency received $7.5 million "to help reduce the backlog" of adequate oceanographic survey data. The Partnership is chaired by the Navy. The funds are to be used by the University-National Oceanographic Laboratory System fleet. The Partnership also received an additional $12 million for Administrative expenses and for research grants;

--$500,000 is provided the Navy's cooperative marine mammal research program.

--The National Polar-Orbiting Operational Environmental Satellite Program received $34 million, or $17.5 million under the Administration request.. NOAA and the Defense Meteorological Satellite Program are partners in this effort to converge NOAA's and DoD's polar weather satellites. The Conferees directed the DoD to conduct "an architectural review of the defense space-based meteorological mission area."

FDA FY '98 APPROPRIATIONS BILL INCLUDES FUNDS FOR SEAFOOD SAFETY

The Agriculture, Rural Development, Food and Drug Administration and Related Agencies Appropriations FY '98 bill (PL 105-86) includes $24 million for a Food and Drug Administration food safety initiative. The Conference Committee directed that the FDA should consider using the **National Sea Grant College Program** to assist in conjunction with its seafood safety activities. For the Conference Committee agreement includes $200,000 for a cooperative agreement with the Interstate Shellfish Sanitation Commission to continue research, safety rules, regulations, and education activities.

FY '98 TRANSPORTATION APPROPRIATIONS BILL URGES DOT TO WORK WITH NOAA IN ESTABLISHING NAVIGATION GROUND STATIONS

The Department of Transportation and Related Agencies Appropriations Bill for FY '98 (PL 105-66) signed by the President on October 27th includes a number of items of direct interest to NOAA:

--It asks the Transportation Secretary to work with NOAA's National Geodetic Survey (NGS) in establishing the Nationwide Differential Global Positioning System (NDGPS). The Conference Committee allocated $2.4 million to initiate the system that it says "will have far-reaching applications in the areas of positive train control, intelligent transportation systems, search and rescue, fire fighting, precision farming, and other public safety missions." The Secretary of Transportation is to ensure that the Coast Guard-operated system is compatible with NGS' Continuously Operating Reference Station. The possible use of NOAA's Global Positioning System Integrated Precipitable Water Vapor System is also to be explored.

--Allocates $1.9 million for a nationwide ballast water management program as authorized in the National Invasive Species Act of 1996 (PL 104-332).

--Provides $15 million for Federal Aviation Administration directed weather research with $11 million earmarked for the National Center for Atmospheric Research and $500,000 for the Center for Wind, Ice and Fog in New Hampshire.

--Prohibits the Coast Guard from issuing or enforcing regulations regarding animal fats and vegetable oil spills.

HEADWATERS FOREST AND ELK RIVER FY 1998 APPROPRIATIONS LANGUAGE HELPS PROTECT CALIFORNIA COHO SALMON WHILE PERMITTING TIMBER HARVESTING OPERATIONS

The FY 1998 appropriations bill and report for the Department of the Interior and Related Agencies Appropriations bill (PL 105-83) signed by the President on November 14th contains detailed language on the Headwaters Forest, an ancient redwood grove in Humboldt County (the Eureka area), California. Headwaters Forest provides vital spawning habitat for coho salmon, as well as providing benefits for steelhead trout, chinook salmon, and cutthroat trout. NOAA's National Marine Fisheries Service (NMFS) and the Pacific Lumber Company have been involved in negotiating a high-profile Habitat Conservation Plan (HCP) in this area so that timber harvesting operations could take place without adversely affecting habitat that is essential for coho salmon. Congress now has redirected those efforts significantly.

Congress provided funds in the FY 1998 appropriation for the acquisition of approximately 4,500 acres (or 1,800 hectares) now known as the Headwaters Forest, approximately 1,125 acres (or 450 hectares) of the Elk Head Forest, and approximately 9,600 acres (or 3,840 hectares) of the Elk River Property in Humboldt County. Of the entire Elk River property, the United States and State of California are to retain approximately 1,845 acres (or 538 hectares) and transfer the remaining approximately 7,755 acres (or 3,102 hectares) to the Pacific Lumber Company. The land retained by the United States and State of California, approximately 7,470 acres (or 2,988 hectares), will thereafter be known as the "Headwaters Forest." The legislation also sets up a Headwaters Forest Management Trust to develop and implement a management plan for the area.

The acquisition of these lands is a high priority for the Administration. Congress added detailed bill and report language about specific requirements that must be met before the acquisition can be completed. Statutory language requires, among other things: 1) a current appraisal; 2) that the State of California approve a Sustained Yield Plan covering the Pacific Lumber Company timber property; 3) a cap on the Federal commitment at the negotiated $250 million level; 4) that the issue of public access be addressed; and 5) that the State of California's $130 million cost share be available before release of the Federal funds. NMFS expects that the State of California will hold a proposition referendum on its share of the funds in either June or November of 1998.

The NMFS role in the acquisition also is outlined in the statutory language. Subsection (b) of Section 501 of the legislation makes the authorization of the $250 million for the acquisition contingent on several conditions, including 1) issuance of an incidental take permit by the U.S. Fish and Wildlife Service and NMFS for the Pacific Lumber Company timber property, and 2) completion of an Environmental Impact Statement on the Pacific Lumber Company HCP and full compliance with the National Environmental Policy Act (NEPA). Subsection (d) contains provisions that requires the Secretaries of Interior and Commerce to report to Congress on the scientific and legal standards and criteria that will be used for developing the HCP and the incidental take permit. NMFS is working on this report, which is due to Congress next month. In addition, if NMFS does not accept the application for an incidental take permit from the HCP applicant (the Pacific Lumber Company), the agency must report its rationale for why the measures proposed did not meet the issuance criteria. This must be reported to Congress within 60 days of the decision or by May 1st, whichever is earlier.

The Endangered Species Act (ESA), its implementing regulations, and the Habitat Conservation and Planning Handbook outline the HCP standards for listed species that are to be covered by an incidental take permit. An HCP provides assurances to a land owner for all species, both listed and unlisted, that are covered by the plan. The legislation does not change or waive any public review through normal NEPA and ESA processes. The Administration has stated that NEPA analyses are being developed for this HCP.

CHECK OUT THE NOAA WEBSITE FOR LEGISLATIVE AFFAIRS FOR TESTIMONIES BY SENIOR NOAA EXECUTIVES, FLOOR STATEMENTS, HEARING AND MARKUP SCHEDULES, AND IMPORTANT CONGRESSIONAL DEVELOPMENTS *HTTP://WWW.NOAA.GOV/NOAA-OLA*

ATMOSPHERIC HAPPENINGS

OZONE HOLE OVER SOUTH POLE EXPANDS

A complete loss of ozone between the altitudes of 14 and 20.5 kilometers was observed recently by NOAA scientists at the South Pole. This is the broadest region and highest altitude in which complete ozone destruction has been observed during the Antarctic springtime ozone hole period to date.

According to David Hofmann, director of NOAA's Climate Monitoring and Diagnostics Laboratory in Boulder, CO., this extension in altitude of total depletion is probably due to continued increases of stratospheric chlorine from human-induced CFCs (chlorofluorocarbons).
While chlorine-containing gases have begun to decline in the lower atmosphere due to restrictions placed on them by the Montreal Protocol and its subsequent amendments, it will take some time for chlorine to disappear from the stratosphere. (The Montreal Protocol is an international agreement to limit ozone-damaging compounds that was originally signed by the United States and 22 other nations in 1987, and subsequently revised and amended.) However, the expectation is that chlorine levels in the upper atmosphere will peak near the turn of the century, resulting in the slow recovery of the ozone layer, Hofmann said.

Balloon soundings at the South Pole indicate that total column ozone reached a minimum of 112 Dobson units on October 8th. This is similar to what springtime minimum readings have been in the past few years, indicating that large changes in the magnitude of springtime Antarctic ozone depletion are not occurring. Dobson units are a measure of the thickness of the ozone layer, which has the ability to absorb ultraviolet light. Prior to the springtime period in Antarctica, when ozone depletion occurs, the normal Dobson unit reading is about 275-300.

Observations from instruments aboard a NOAA satellite indicate that the size of the Antarctic ozone "hole" approached 22 million square kilometers in early October. This is comparable to the recent size as observed by the NOAA-9 instrument in 1995 and 1996 at the same time of the season.

NOAA RELEASES *OUR CHANGING CLIMATE,* AN EDUCATIONAL TOOL ON GLOBAL CLIMATE CHANGE; CIRCULATED AT KYOTO CLIMATE SUMMIT

NOAA released a new educational tool on October 15th, *Our Changing Climate*, a publication designed to raise the level of public awareness on issues dealing with global environmental change. It was chosen by the White House for circulation at the Kyoto Global Climate Summit.

"The public is becoming increasingly aware of climate issues and people are interested in understanding how these issues will affect their lives," said Dr. D. James Baker, NOAA administrator. "This new publication serves as an important tool to educate the public on a topic of rising concern."

More than 400,000 copies of *Our Changing Climate* will be shared with science teachers, educators and libraries through a collaborative effort of NOAA's Office of Global Programs and the University Corporation for Atmospheric Research's Office for Science Support. University of Washington professor Dennis Hartmann is the primary author of the publication.

Through the use of vividly colored graphics and input from the scientific community, *Our Changing Climate* discusses historical events attributed to climate such as the American Ice Age, the Dust Bowl of the 1930s, and phenomena such as the Greenhouse Effect. The publication also discusses socio-economic impacts that result from climate patterns such as El Niño, where abnormal temperature and precipitation patterns result in flooding or drought.

Our Changing Climate is the fourth publication in the award-winning series "Reports to the Nation on Our Changing Planet." Please E-Mail *rtn@joss.ucar.edu* for copies of the report.

FIRST SEARCH AND RESCUE EMERGENCY BEACON TEST FACILITY IN U.S.DEDICATED BY NOAA AND ARMY IN SOUTHERN ARIZONA

A facility that will test emergency radio beacons used for international search and rescue applications was dedicated on September 4th at the Army's Electronic Proving Ground in Fort Huachuca, AZ. The new facility, the first of its kind in the United States, will conduct certification testing on the beacons, it was announced on August 27th.

Currently, if a U.S. manufacturer plans to produce an emergency beacon for use with the international search and rescue system known as Cospas-Sarsat, that manufacturer must coordinate with a lab in the United Kingdom or France. This can cause delays, complicated logistics and increased costs. Now, U.S. manufacturers will have a state-of-the-art facility in their own backyard.

Before approval of a new beacon design, or of modifications to an existing design, each manufacturer must submit a production beacon for a thorough battery of certification tests at a Cospas-Sarsat approved facility. Upon successful completion of these tests, the design is given Cospas-Sarsat certification, which allows for worldwide sale of the beacon. Manufacturers benefit by working with a test lab in their home country and the taxpayers benefit by fuller use of an existing resource. All start-up and operating costs will be paid by fees charged to manufacturers.

The Cospas-Sarsat system is an international, humanitarian, cooperative search and rescue program, which uses U.S. and Russian satellites to detect and locate emergency beacon signals from people in distress. The SARSAT instruments are built by Canada and France and flown aboard the NOAA series of polar-orbiting satellites and the GOES series of geostationary weather satellites. NOAA is the agency in the United States responsible for administering and operating the system. Since its inception in 1982, Cospas-Sarsat has helped save more than 7,300 lives worldwide and 3,000 in the United States.

The Army's Electronic Proving Ground, established in 1954, has a wealth of experience in testing electronic devices for

use on the battlefield. Personnel there will now be able to apply that expertise to emergency beacons. One benefit gained by locating the beacon test facility at Fort Huachuca is its extensive experience with the Global Positioning System (GPS). Cospas-Sarsat plans to implement a change to the system that will allow emergency beacons to transmit their positions directly to the satellites using GPS receivers. This new capability will require certification of an entirely new type of emergency beacon.

Representatives from NOAA, the Department of Defense, the National Aeronautics and Space Administration, the Coast Guard, and the Mayor of Sierra Vista, AZ attended the ceremony Representatives from a number of American and Canadian beacon manufacturers also were present.

TROPICAL PREDICTION CENTER/NATIONAL HURRICANE CENTER DIRECTOR ASSUMES NEW DUTIES

Robert W. Burpee, director of the National Weather Service's Tropical Prediction Center/National Hurricane Center in Miami, has been reassigned from his director's duties citing health concerns. Dr. Burpee has transferred to a senior scientist position within the Center, effective August 31st.

Burpee, the Center's director since July, 1995, said, "I requested this reassignment to other duties to allow time for full recovery from continuing health concerns, most recently difficulties with my vision following cataract surgery."

"Dr. Burpee is an asset to our organization and the field of hurricane research," said Dr. Ron McPherson, director, National Centers for Environmental Prediction, parent organization of the Tropical Prediction Center/National Hurricane Center. "I am pleased that he will continue working with us in a research capacity.

"Dr. Burpee is an excellent manager and has established a team approach to hurricane forecasting where operations are not dependent on any one person, including himself. This should allow for a smooth transition as we search for a new Center director," said McPherson.

Jerry Jarrell, currently the Tropical Prediction Center/National Hurricane Center deputy director, will serve as acting director in the interim. Department of Commerce human resource officials report that the search for a new Hurricane Center director began on September 2nd.

NEW DROPWINDSONDES GIVE NOAA SCIENTISTS MOST DETAILED PORTRAIT TO DATE OF A HURRICANE

Hurricane forecasting took a big step forward recently with the successful testing of new and improved instruments that are dropped from "hurricane hunter" aircraft to measure temperature, pressure, humidity, and wind speed and direction. The experiment, carried out in August during Hurricane Guillermo, produced the most complete and detailed portrait of a hurricane ever seen, said NOAA scientists.

The successful test enabled scientists to deploy the instruments during September's Hurricane Erika from NOAA's new Gulfstream-IV jet in its first operational mission, and from the agency's two WP-3D Orion aircraft. The resulting data caused forecasters at NOAA's National Hurricane Center, who plotted the data in real time, to improve their hurricane track prediction.

During the Guillermo experiment, scientists from NOAA's Hurricane Research Division and NOAA Corps pilots and civilian technical crews from the Aircraft Operations Center flew two research WP-3D aircraft into the Category 5 (most intense) hurricane, which was raging over the eastern Pacific Ocean. The aircraft carry Doppler radars that measure winds throughout the hurricane's domain, from the ocean surface to 10 kilometers above.

Nearly a hundred newly developed instruments – called Global Positioning System dropwindsondes — were deployed from the aircraft with an outstanding success rate.

The NOAA ship *Ronald H. Brown*, one of the most advanced research ships in the world, was south of the storm's center and also released weather balloons periodically to supplement the dropwindsonde data. Weather balloon-borne instruments are similar to dropwindsondes, only they go up instead of down. Collaborating university scientists simultaneously acquired and analyzed NOAA satellite imagery over a larger area around the hurricane, helping put the dropwindsonde data into context.

"Hurricane Guillermo provided an ideal proving ground for the Vortex Motion and Evolution Experiment," said Hugh Willoughby, chief of the Hurricane Research Division. "Together the radars, dropwindsondes, ship data, flight level instruments and satellites produced the most complete and detailed portrait of a hurricane to date. Observations of this kind enable tropical meteorologists to further improve forecasts of hurricane motion and address the problem of skillfully forecasting hurricane intensity."

The dropwindsondes were developed as the primary scientific payload of NOAA's new Gulfstream-IV jet, which flies up to 12,500 meters around hurricanes in the steering currents, and for the lower flying P-3 aircraft that penetrate the hurricanes for research purposes. The new dropwindsondes replace 1970's technology.

"We are extremely pleased with the performance of the dropwindsondes," said Capt. George Player, director of the Aircraft Operations Center in Tampa, FL, which is part of the Office of NOAA Corps Operations. "Engineers in AOC's Science and Engineering Division have extensively tested the instruments and corrected problems with the manufacturer's original design. Now we're getting the results we want."

The aircraft are equipped with computer systems that "talk" to the dropwindsondes, and that create graphic images. This technology allows scientists to actually see the physical processes of hurricanes, and measures wind, temperature and humidity every five meters as the dropwindsonde falls.

The hurricane vortex experiment was designed to look at how whirlpools and currents of wind cause a storm to move – or

how the environment controls the motion and intensity of the storm. Though hurricane track forecasting has improved steadily over the years, the new dropwindsondes technology, coupled with other land-, ship-, aircraft- and satellite-based technology, will help scientists better understand the physics that determine hurricane intensity. The ultimate payoff will be more precise intensity forecasts that will help prevent overwarning – and the adverse economic impact (as much as $412,000 per kilometer) caused by unnecessary evacuations. The most destructive hurricanes form by the processes of rapid deepening that may convert a 144 kilometers-per-hour hurricane into one with 240 kilometers-per-hour winds in less than a day. Understanding how hurricanes work will help forecasters anticipate sudden changes in intensity and motion.

ERIK RASMUSSEN NAMED OUTSTANDING YOUNG SCIENTIST

Erik N. Rasmussen, a tornado researcher with the NOAA-University of Oklahoma Cooperative Institute for Mesoscale Meteorological Studies, has been named one of 60 outstanding young U.S. scientists by President Clinton. He received the award from the President in a White House ceremony November 3rd.

Currently serving as a member of the Thunderstorm Studies Team at National Severe Storms Laboratory facilities in Boulder, CO, Rasmussen was specifically cited by the President for "significant advances in the understanding of tornado genesis by planning and directing a major field experiment and conducting subsequent observational studies."

Since receiving his Ph. D. from Colorado State University in 1992, Rasmussen has been responsible for planning and directing Project VORTEX (Verification of the Origins of Rotation in Tornadoes Experiment), a field experiment designed to greatly enhance our understanding of severe storms and improve NOAA tornado predictions and warnings by intercepting tornadoes and studying them close-up.

The annual Presidential Early Career Award for Scientists and Engineers, established by the President in February 1996, is the highest honor bestowed by the U.S. government on outstanding scientists and engineers in the early stages of their careers. In announcing the awards October 24th, President Clinton said, "These gifted young professionals exemplify the best of our science and technology community and will help set the scientific pace for the U.S. and the world in the years ahead. Their passion for discovery and their determination to explore new scientific frontiers will drive this nation forward and build a better America for the twenty-first century."

A native of Hutchinson, KS, and currently a resident of Louisville, CO, Rasmussen received his B.S. in meteorology from the University of Oklahoma and his M.S. in atmospheric science from Texas Tech University.

COMMERCE DEPARTMENT RELEASES WEATHER SERVICE "KELLY REPORT"; CONGRESSIONAL OFFICES NOTIFIED; SECRETARY DALEY CALLS REPORT "SOLID ROADMAP FOR THE FUTURE"

On October 23rd, the Commerce Department released the findings and recommendations from the review of the National Weather Service's (NWS) budget and operations, completed by Retired Air Force Brigadier General Jack Kelly. Secretary Daley notified key Members of the Report's contents. Also, NOAA informed Congressional staffers of the key contents of the report. In addition, the executive summary and NOAA press release were faxed out to interested Members who in the past wrote to the Commerce Department or NOAA on (NWS) budget issues.

In response to the Report's recommendations, Secretary of Commerce William M. Daley announced that he is terminating plans to close the NWS's Southern Regional Headquarters in Fort Worth, TX. "The four regional offices in the continental United States will be retained , but at reduced staff levels," the Secretary stated. The Secretary also announced that he will create a new position within the NWS of Chief Financial Officer. Secretary Daley said he will also direct NWS to implement the series of 27 "recommendations (that) highlight (the) need for changes in business practices and fiscal and management policies and procedures."

Secretary Daley said the Department was in the final stages of recruiting a new NWS Director "for whom these reforms will be the highest priority." The NWS Acting Director is currently Dr. Robert Winokur, Assistant Administrator for National Environmental Satellite, Data, and Information Service.

NOAA CLIMATE EXPERT SORTS OUT UNCERTAINTIES IN PROJECTIONS OF HUMAN-CAUSED CLIMATE WARMING

Is the Earth warming, how is humankind contributing, and what will be the consequences? These and other important questions are answered by J. D. Mahlman, director of NOAA's Geophysical Fluid Dynamics Laboratory in Princeton, NJ, writing in the November 21st issue of *Science*.

Dr. Mahlman succinctly summarizes the current climate debate, sorts out the various principal predictions of future climate, and rates the confidence level of these predictions on a scale from virtually certain facts to incorrect projections.

According to Dr. Mahlman, some virtually certain facts include: Greenhouse gases, which warm the planet, are increasing. These gases affect the climate for many centuries after they enter the atmosphere. Human-caused increases in carbon dioxide and decreases in ozone in the stratosphere have already resulted in a 1 degree Celsius average cooling there. Over the past century, the Earth's surface has warmed about .5 degrees Celsius.

Some very probable projections (greater than 9 out of 10 chance of being true) include: A doubling of carbon dioxide in the atmosphere over pre-industrial levels in the next century will lead eventually to an average warming of from 1.5 to 4.5 de-

grees Celsius. By 2100, average sea level could rise 25-75 centimeters.

Some probable projections (greater than 2 out of 3 chance of being true) include: Models project marked decreases in soil moisture in response to increases in summer temperatures over northern mid-latitude continents. Tropical storms, once formed, might tend to become more intense.

Some incorrect projections include: The number of tropical storms, hurricanes and typhoons per year will increase. Dr. (Mahlman says there is no credible evidence for this.) Winds in mid-latitude, versus tropical, cyclones will become more intense. (Dr. Mahlman notes it is theoretically plausible that smaller-scale storms such as thunderstorms or squall lines could become stronger under locally favorable conditions, but the direct evidence remains weak.)

"Although we cannot yet produce a sharp picture of future climate, either globally or locally," Dr. Mahlman points out that none of these known uncertainties will make the problem of human-induced greenhouse warming go away. "It is virtually certain," he concludes, "that this warming will continue for a long time and that the severity of impacts from a changed climate depend on resolving uncertainties in the climate system and in our success in reducing emissions of greenhouse gases."

FEMA, NOAA ENCOURAGE WINTER PREPAREDNESS BASED ON EL NINO CONDITIONS

While the seasonal predictions based on El Nino conditions may point to an overall mild winter in some parts of the nation, people regardless of where they live or travel should be ready for the worst that winter can offer, officials from NOAA and Federal Emergency Management Agency (FEMA) advised on November 19th.

FEMA Director James Lee Witt emphasized that "preparing in advance and knowing what to do will save many lives, including a great many of those who die every year in fires caused by improperly-used space heaters, faulty furnaces or the like," Mr. Witt added: "You should know the winter hazards you face in your region or when you travel, how to avoid or reduce those hazards, and you should take steps now to be prepared."

Weather patterns over the United States are expected to be impacted considerably by this year's strong El Nino, especially during the winter months. NOAA's long lead climate outlooks predict that the southern United States will be wetter than normal, while somewhat drier than normal conditions develop in the northern High Plains and in sections of the Midwest during the fall and winter season, the typical pattern during an El Nino.

Temperatures are likely to be warmer than normal in the northern half of the United States and along the California coast, and slightly cooler than normal along the Gulf Coast during late winter and early spring. Average temperatures in the far West, the Northwest and from the Northern Great Plains eastward through New York state will generally be above normal, said Ed OLenic, senior meteorologist with the National Weather Service Climate Prediction Center in Camp Springs, MD.

According to Kay Goss, FEMA's Associate Director for Preparedness, Training, and Exercises, "Our fear is that predictions of mild winter weather in some parts of the nation could tempt some people to let their guard down."

"Mild winters can still serve up some pretty powerful storms," said Kevin McCarthy, a program manager in NWS's Office of Meteorology in Silver Spring, MD. "One of the most memorable winter storms this century paralyzed the entire East coast for days in March of 1993, a recent winter affected by an El Nino."

Emergency management officials point out that timely preparation, including structural and non-structural mitigation measures to avoid the impacts of severe winter weather, can avert heavy personal, business and government expenditures.

The best source for the most current National Weather Service forecasts and storm warnings comes from local NOAA Weather Radio broadcasts, Mr. McCarthy said. Special radios sold at most electronics stores can pick up NOAA Weather Radio frequencies. The National Weather Service operates more than 450 NOAA Weather Radio transmitters throughout the country.

INSTALLATION OF SATELLITE GROUND SYSTEM IS MAJOR STEP IN COST-SAVING MERGER OF GOVERNMENT SATELLITE PROGRAMS

A major step in the merger and streamlining of government weather satellite programs has been initiated with the installation of a new satellite control system in a NOAA facility, the Commerce Department announced November 18th.

"This installation represents a major milestone in the planned merger of two environmental satellite programs operated by the federal government — the Defense Department's and NOAA's, said James T. Mannen, director of the Integrated Program Office. "The elimination of separate systems is projected to save taxpayers more than $678 million through FY 1999. This figure jumps to nearly $1.8 billion over the life of the program, when compared with the cost of continuing to acquire and operate separate systems."

The new system will be used to operate environmental satellites in the Defense Department's Defense Meteorological Satellite Program (DMSP). These satellites are currently operated by an Air Force Space Command squadron at Offutt Air Force Base, NE. Under a plan to combine the Defense Department's program with NOAA's polar-orbiting environmental satellite program, NOAA will be responsible for operating both systems. Installation of the new equipment is the first in a series of steps leading to combined operations from Suitland. NOAA is scheduled to begin operations of the DMSP satellites next summer. The installation of the Integrated Polar Acquisition and Control Subsystem is currently taking place in Suitland. The equipment, developed by Integral Systems Incorporated, teamed with Harris Corporation and Lockheed Martin, recently passed its first major development test, and installation began.

NOAA currently operates two polar-orbiting environmental satellites and two geostationary satellites. Operation of the DMSP satellites will add two polar-orbiting satellites to NOAA's responsibility. Eventually, the combined polar system will consist of three polar-orbiting satellites — two U.S. satellites and one European satellite. NOAA's geostationary constellation of two satellites will not be affected.

The next major phase in the convergence effort is the development and acquisition of a single National Polar-orbiting Operational Environmental Satellite system (NPOESS) capable of meeting both civil and military requirements for space-based environmental data.

The NPOESS will become operational toward the latter half of the next decade, and will eventually replace the current systems operated by the Defense Department and NOAA. The convergence effort is a result of Vice President Gore's National Performance Review, known as Reinventing Government.

NATIONAL WEATHER SERVICE'S AWIPS SYSTEM EARNS POPULAR SCIENCE "BEST OF WHAT'S NEW" AWARD

The computer system designed to be the cornerstone of the modernized National Weather Service (NWS) has earned one of 100 of the 1997 "Best of What's New" awards presented November 11th by *Popular Science* magazine in New York City.

The Weather Service's interactive weather computer and communications system helps provide better weather- and flood-related services to protect life and property. The Advanced Weather Interactive Processing System (AWIPS), gives forecasters access to real-time satellite imagery, Doppler radar data, automated weather observations and computer-generated numerical forecasts, all in one workstation.

"AWIPS lets our forecasters display weather data in a variety of ways, quickly analzing evolving weather systems, and issuing timely forecasts and warnings for the protection of life and property," said Mary Glackin, NWS modernization systems manager. "Forecasters who don't yet have AWIPS need three or more systems to gain access to the information they need to produce the products they disseminate."

Early versions of the sophisticated workstation and communications network are installed at a number of NWS sites around the country for operational testing and evaluation.

The AWIPS systems have become an invaluable resource to forecasters and hydrologists, and will be a tremendous boon to forecast operations across the country," said Louis J. Boezi, NWS Deputy Director for Modernization. "The NWS is developing AWIPS in incremental stages to allow for incorporating continuous user feedback into ongoing development efforts."

"AWIPS is a wonderful tool," said Bill Alder, the meteorologist in charge of the Salt Lake City NWS office, a test site for AWIPS. "Our forecasters are saving one to two hours of time in making our forecasts. The system really makes it fun to be a meteorologist."

AWIPS is the integrating technology component of a $4.5 billion NWS modernization effort, designed to provide the nation with improved weather services.

To date, all of the 123 state-of-the-art NWS Doppler radars are installed and operational. Two hundred and forty-eight of the 306 NWS automated surface observing systems are operational nationwide. Two advanced geostationary weather satellites, GOES-8 and GOES-9, are keeping watch over the United States and well into the Pacific and Atlantic oceans. And identical third satellite, GOES-10, is available if one of the operational pair fails. In addition, 13 River Forecast Centers and 113 of the planned 119 new weather forecast offices are serving the country.

AWIPS is being developed by the NWS, NOAA's Forecast Systems Laboratory in Boulder, CO., and PRC Inc. of McLean, VA. The NWS is installing AWIPS systems at 21 additional field sites. In December, Secretary Daley gave his approval for the deployment of an additional 19 sites. Plans call for the eventual installation of 152 AWIPS systems.

WEST COAST STORMS AFFECTED BY EL NIÑO TO BE STUDIED THIS WINTER

Winter storms in California and Oregon — with the possibility of increased rainfall due to El Niño — are being studied by government and university scientists hoping to improve forecasts of heavy rain, snow and wind along the West Coast.

The study, called CALJET (California Land-Falling Jets Experiment), began on December 1st, and includes scientists and forecasters from NOAA, the U.S. Navy, and various universities. It is particularly timely with the onset of the severe storms last week along the California coast. The study will run through March of 1998, which is the wet season in that area.

CALJET will use the NOAA P-3 aircraft with a variety of instruments such as GPS (Global Positioning System) dropwindsondes, which take meteorological measurements as they are dropped from the aircraft, dual-Doppler-capable radar, a gust probe, and other instruments. A special observing period will run from Jan.18 to Feb. 28 when the NOAA P-3 and the University of Oklahoma's Doppler on Wheels, a Doppler radar mounted on a truck, will participate, operating out of Monterey.

The P-3, flown by NOAA Corps pilots, will be sent to find the low level jets associated with storms that occur within this time period. It will detect the jets about 12 hours before the storm strikes the coast. The Doppler on Wheels will then be deployed to measure the heart of the heavy rains when the storm strikes. Data collected from the P-3, buoys, and wind profilers will be used in nowcasting and operational numerical weather prediction. Special observing areas will be created along the coast near Santa Rosa; in the area between Santa Barbara and Crescent City; and in the California Bight area from Santa Barbara to San Diego. These locations were designated due to the possibility of heavy rainfall in those areas and the high population density.

OCEANIC HAPPENINGS

UNITED STATES CONDEMNS NORWEGIAN WHALING

WHALING COMMISSION APPROVES COMBINED RUSSIAN - MAKAH GRAY WHALE QUOTA
RUSSIAN - ALASKAN NATIVE BOWHEAD QUOTA ALSO APPROVED

The International Whaling Commission (IWC) on October 23rd adopted a quota that allows a five-year aboriginal subsistence hunt of an average of four non-endangered gray whales a year for the Makah Indian Tribe, combined with an average annual harvest of 120 gray whales by Russian natives of the Chukotka region.

A combined quota accommodates the needs of the two aboriginal groups hunting whales from a single stock. The commission adopted the combined quota by consensus, thereby indicating its acceptance of the United States' position that the Makah Tribe's cultural and subsistence needs are consistent with those historically recognized by the IWC. The Makah Tribe, located on the remote northwest tip of Washington state, expects to start its subsistence hunt in the fall of 1998 under government supervision. The Makah quota will not involve commercial whaling.

"The United States has fulfilled its moral and legal obligation to honor the Makah's treaty rights. The right to conduct whaling was specifically reserved in the 1855 U.S.-Makah Treaty of Neah Bay," said Will Martin, alternate U.S. commissioner to the International Whaling Commission, and NOAA Deputy Assistant Secretary for International Affairs.

The two countries agreed to submit a joint request for an average of 124 gray whales a year, of which 120 are for Russia's Chukotka people, and four are for the Makah Tribe. The United States and Russia tabled the joint resolution after many countries suggested that the two nations work together to address reducing the overall quota.

In preliminary proceedings, the Russian government had outlined its need for 140 gray whales a year and the Makah Tribe had outlined its need for up to five gray whales a year.

Over a five-year period, the joint quota will reduce the number of whales taken by 80 from the existing Russian 140-whale annual quota. The Commission's Scientific Committee will conduct an annual review of the gray whale stock and can recommend changes to the quota. "The approval of this joint gray whale quota reduces the overall number of whales taken while addressing the needs of native groups," said Mr. Martin.

The Makah request is unique among native peoples, in that the tribe's 1855 Treaty of Neah Bay is the only Indian treaty in the United States that expressly reserves a tribal right to go whaling. "We are pleased that the commission has recognized the cultural and subsistence need of the Makah Tribe," said Marcy Parker, Makah Tribal Council member, and member of the United States delegation. "We will now develop a management plan and are committed to being a responsible co-manager of the gray whale resource in our usual and accustomed whaling grounds."

The Makah have a 1,500-year whaling tradition. Tribal whaling ceased in the early 1900's after commercial whalers had decimated whale stocks and government assimilation programs forced tribal members to abandon their intricate whaling rituals and pursue an agrarian lifestyle. Today, almost half of the Makah people live below the poverty line, unemployment is nearly 50 percent, and their subsistence fish and shellfish resources are dwindling to all-time lows.

"We appreciate the support and dedication the United States government has shown the Makah Tribe in our request to resume our centuries-old whaling heritage. The Makah tribal members will now be able to again perform important whaling rituals and receive sustenance from this important and traditional marine resource. Today will mark one of the most significant events in our history with western civilization that will now be passed on through our oral traditions as a positive move toward cultural revival of vital missing links once thought lost to our people," said Ms. Parker.

The Makah Tribe will not use commercial whaling equipment, but will combine humane hunting methods with continued traditional hunting rituals, including using handcrafted canoes. The U.S. government's environmental assessment of the hunt found it will not adversely affect the gray whale stock's healthy status, which is currently at more than 22,000. The gray whale was taken off the U.S. Endangered Species Act list in 1994.

In a related action, the commission approved a combined quota of bowhead whales to meet the needs of the Eskimos in Alaska and Russia. The combined quota allows an average of 56 bowhead whales to be landed each year. The Alaska Eskimos have been conducting aboriginal subsistence hunts with approval of the International Whaling Commission since the commission began regulating such hunts in the 1970's.

"We are pleased that the commission continues to recognize the importance of the bowhead whale hunt to Alaskan Eskimos," said Mr. Martin. "The central focus of the bowhead hunt in the culture of the Eskimos is well known."

The 39-member International Whaling Commission is the sole international body with authority to regulate all forms of whaling. Under the commission's whaling regulations, native communities are allowed quotas for subsistence and cultural purposes. Such quotas prohibit the sale of any edible whale products from aboriginal subsistence hunts.

FOR FUTURE HEARING AND MARKUP SCHEDULES FOR NOAA ISSUES AND THE NAMES OF NOAA WITNESSES CHECK THE LEGISLATIVE AFFAIRS HOMEPAGE: *HTTP://WWW.NOAA.GOV/NOAA-OLA*

NOAA SANCTUARIES CELEBRATE 25TH

On October 23rd, 1972, President Richard Nixon signed the Marine Protection, Research and Sanctuaries Act, thereby creating the National Marine Sanctuary Program.

Over the years, National Marine Sanctuaries have showcased NOAA's many products and services, from satellite imagery to fisheries management, research to restoration, charting to emergency response. Many people's lives are enriched by their connection with the sea, and NOAA's marine sanctuaries combine coordinated management, research, and education to ensure that future generations will have the opportunity to be equally enriched.

To accomplish this, NOAA designates marine sanctuaries as models for innovative management of protected areas, integrates the human dimension into management, encourages public and private partnerships, and promotes stewardship. These goals support NOAA's mission to conserve and manage wisely the nation's coastal and marine resources to ensure sustainable economic opportunities.

Today, NOAA administers 12 marine sanctuaries protecting over 28,800 square kilometers of coral reefs, kelp forests, and other coastal and marine habitats off Massachusetts, North Carolina, Georgia, Florida, Texas, California, Washington State, Hawaii, and America Samoa. Sanctuaries are home to surfers and sea otters, boaters and barracuda, fishers and fin whales, beach-combers and comb jellies. They also protect our historical and cultural ties to the sea, such as the remains of the Civil War ironclad USS Monitor and Native American cultures.

MAINE TAKES LEAD FOR ATLANTIC SALMON PROTECTION

The National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service announced on December 15th that they are withdrawing a proposal to protect Atlantic salmon in seven Maine rivers under the federal Endangered Species Act. Instead, the fish will be protected by a cooperative recovery effort spearheaded by the State of Maine.

Officials emphasized that the recovery of Atlantic salmon stocks depends on full implementation and monitoring of Maine's newly developed Atlantic Salmon Conservation Plan.

"This plan, which was developed by a state-appointed task force with input and advice from federal fisheries scientists, is an innovative effort to resolve the real world conflicts that occur when preserving a species clearly means rethinking traditional uses of a river," said NOAA Deputy Administrator Terry Garcia. "Our decision to protect salmon through this plan rather than through a listing under the Endangered Species Act highlights the ESA's flexibility and our willingness to consider state-designed plans."

The cooperative recovery effort includes state, federal and private programs and is only the second of its kind in the nation approved for a fish species. It includes continuing broodstock development and stocking of Atlantic salmon in rivers, upland habitat improvement, construction of fish weirs on some of the rivers, changes in both aquaculture and agriculture operations to reduce their threats to salmon survival, and continuing monitoring and research programs to evaluate and improve progress.

The centerpiece of the protection effort is the state-designed plan that addresses the potential impacts of aquaculture, forestry, recreational fishing, and a wide range of agricultural activities. The plan was developed during the last two years by a task force of scientists, academics, state employees, Native American sustenance fishers, conservationists, anglers and private citizens, all appointed by Maine Governor Angus King.

NOAA DEDICATES NEW NATIONAL ESTUARINE RESEARCH RESERVE IN NEW JERSEY NAMED IN HONOR OF JACQUES COUSTEAU

At an October 20th ceremony in Tuckerton, NJ, the Assistant Administrator for Oceans Services and Coastal Zone Management, Dr. Nancy Foster joined Reps. James Saxton (R-NJ) and Frank LoBiondo (R-NJ) in dedicating the Jacques Cousteau National Estuarine Research Reserve at Mullica River/Great Bay. This newest addition to the National Estuarine Research Reserve System (NERRS) becomes the 21st reserve and contributes 46,000 hectares of pristine pinelands forest, barrier islands and wetland ecosystems to the NERRS. Rep. Saxton, who is also chairman of the Fisheries Conservation, Wildlife and Oceans Subcommittee, requested that this new reserve be named in honor of Jacques Cousteau as a tribute to Cousteau's life contributions on behalf of ocean resource conservation and protection. NOAA will administratively facilitate the naming of the site when it publishes in *The Federal Register* the formal designation document later this year. Rep. Saxton on October 7th introduced HR 2630 to mandate the name change. The bill was referred to the Resources Committee.

NOAA SELECTS PANEL TO ADVISE ON HIGHLY MIGRATORY SPECIES

NOAA on October 7th announced its selection of highly qualified applicants to an advisory panel that will assist NOAA's National Marine Fisheries Service in the collection and evaluation of information on future management of the fisheries for Atlantic tunas, swordfish and sharks.

Those nominees selected to the advisory panel represent a balance of recreational and commercial fishing interests and related industries, environmentalists, academics and government agencies.

The advisory panel is being formed to meet requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Panel members will be assisting the fisheries service in meeting new requirements of the Magnuson-Stevens Act, including development of rebuilding programs for overfished fisheries for Atlantic highly migratory species (HMS). The fisheries service will consult with the advisory panel throughout the process of developing a management plan for Atlantic tunas, swordfish and sharks.

The panelists are:

FISHERY MANAGEMENT COUNCILS (FMCS)

Five representatives, one from each of the five East Coast FMCs, to be chosen by the chairperson of each FMC.

U.S. ADVISORY COMMITTEE (IAC) TO THE INTERNATIONAL COMMISSION FOR THE CONSERVATION OF ATLANTIC TUNAS

Dr. John Graves - Chairman of IAC

COMMERCIAL

--Nelson Beideman, Blue Water Fishermen's Association, Barnegat Light, NJ

--Tristram Colket, Directed Shark Fishery Association, Vero Beach, FL

--Robert Fitzpatrick, Maguro America, S. Chatham, MA

--Gail Johnson, Longline Vessel F/V Seneca, S. Harpswell, ME

--Steve Loga, Tuna Fresh, Inc., Dulac, LA

--Richard Ruais, East Coast Tuna Assn.,Salem, NH

--Bob Spaeth, Southern Offshore Fishing Assn., Madeira Beach, FL

--Peter Weiss, General Category Tuna Assn., Boston, MA

RECREATIONAL

--David Arbeitman, The Reel Seat Tackle Shop, Brielle, NJ

--Ray Bogan, United Boatmen of New York and New Jersey, Point Pleasant, NJ

--Jim Donofrio, Recreational Fishing Alliance, New Gretna, NJ

--Bob Eakes, Red Drum Tackle Shop, Buxton, NC

--Ellen Peel, The Billfish Foundation, Ft. Lauderdale, FL -

--Mark Sampson, Fish Finder Adventures, Ocean City, MD

--Bob Zales, Bob Zales Charters, Panama City, FL

Other

--Dr. John Dean, University of South Carolina,Columbia, SC

--Dr. David Wilmot, Ocean Wildlife Campaign, Washington, DC

--Dr. John Wingard, University of Tennessee, Memphis, Tenn.

--Sonja Fordham, Center for Marine Conservation, Washington, DC

--Dr. Carl Safina, National Audubon Society, Islip, NY

--Dr. Bob Hueter, Mote Marine Laboratory, Sarasota, FL

Advisory panel meetings are expected to be held twice yearly. The first meeting was held Oct. 16-17, 1997 in Silver Spring, MD.

FLORIDA AND NOAA STOP FREIGHTERS FROM DROPPING ANCHOR ON LIVING CORAL

The state of Florida and NOAA announced on October 14th an emergency sanctuary rule to prevent vessels 50 meters or greater in length from anchoring on living coral within the Florida Keys National Marine Sanctuary. Responding to information from a dive charter captain who videotaped and reported anchoring damage to sanctuary officials, the cooperative action addresses clear evidence of damage to living corals caused by large, foreign-flagged vessels anchoring within state waters on the Tortugas Bank.

"This is a good example of what we envisioned the Florida Keys sanctuary could achieve in protecting both the natural and economic resources of the Keys," said Florida Governor Lawton Chiles.

When state and NOAA resource managers learned that large foreign flagged freighters have been anchoring in sensitive reef habitat in state waters west of the Dry Tortugas National Park, sanctuary officials sent a team of biologists to the area to assess the situation. They noted significant damage to corals, sponges, and other delicate organisms. Wide swaths of barren seabed and overturned coral heads were evidence of on-going disruption to the coral reef community. During the two-day period alone, the biologists witnessed four large ships anchored in the coral, some with anchors as large as 4.5 meters in length held in place by chains with individual links as large as 50 centimeters.

The state and NOAA are addressing the problem by prohibiting vessels 50 meters or greater in length from anchoring in the area. The affected area extends from the western edge of the Dry Tortugas National Park to the western sanctuary boundary. The emergency rule will stop damage immediately while the public process to implement a permanent rule can be undertaken. Pursuant to the state-federal agreement, an emergency rule can be in place no longer than 120 days. Any proposed sanctuary regulatory amendment in state waters must be taken before the Florida Board of Trustees for approval as well as go through the federal rule process before they can become permanent. NOAA and the State expect a final rule in place before the 120 day period expires in early 1998.

Although the emergency rule will stop large ships from dropping anchor on the coral, it will not affect other activities in the area. Vessel transit, fishing, and all other activities and uses of this area will remain the same. In addition, sanctuary officials are identifying alternative sites for the freighters to anchor so that the shipping companies are not unduly impacted by the change. Officials are recommending the freighters anchor west of the sanctuary boundary in depths greater than 36 meters where the bottom consists of sand and mud. As Tortugas Bank is under approximately 18 meters of water, the existing anchoring regulation does not apply.

This joint resource protection decision is the first of its kind for the sanctuary. As it is managed in a co-trusteeship with the state of Florida, the decision to implement an emergency rule on state lands and waters must be a joint one.

"This incident shows the value of the state-federal partner-

ship," said Sanctuary Superintendent Billy Causey. "Together we can act immediately to prevent further injury to our coral reef resources. The emergency rule will only affect those ships 50 meters and longer that are anchoring on living coral formations. During this period we will be pursuing a permanent rule through a public process that will ensure that wonders like the sensitive reefs of the Tortugas area are here for years to come."

SETTLEMENT SPEEDS PUERTO RICO CORAL REEF REPAIR

Repair and restoration of a coral reef damaged by a freighter that ran aground off Mona Island in Puerto Rico are now underway, thanks to a $1.25 million settlement among a shipping company, the Commonwealth of Puerto Rico, and NOAA, it was announced on October 3rd.

Rama Shipping Company of Thailand agreed to pay $1.25 million to the Commonwealth and NOAA for natural resource damages caused by the July 24th grounding of the M/V *Fortuna Reefer*. The government agencies, acting as trustees for the injured natural resources, will use the settlement funds for restoration projects and damage assessment costs.

The settlement, reached on September 11th, provides $650,000 for emergency restoration of broken corals that is being conducted under NOAA leadership, and $400,000 for compensatory restoration under the leadership of the Commonwealth, plus reimbursement of trustee costs. Emergency restoration of some 400 pieces of elkhorn coral was initiated on September 20th by NOAA's Damage Assessment and Restoration Program in cooperation with the Commonwealth of Puerto Rico.

Quick settlement between the natural resource trustees and the responsible party makes it possible to reattach the still living pieces of elkhorn coral broken off of the reef.

"The prompt recovery of restoration funds for this damage demonstrates the tremendous benefits that accrue to the nation's natural resources when responsible parties and trustees cooperate to quickly restore injuries," said Terry Garcia, Acting Assistant Secretary for Oceans and Atmosphere.

"The Department's main goal is the conservation and restoration of natural resources and to that end, the state and federal trustees managed this case on a fast track basis," said Daniel Pagan Rosa, secretary for the Puerto Rico Department of Natural and Environmental Resources. "We are pleased with the outcome and are eager to commence the restoration work and the project with the funds secured through the settlement for compensatory damages," he said.

Experts plan to remove the largest broken pieces of branching elkhorn coral from the sea floor and reattach them before they succumb to winter storm damage. Emergency restoration will reverse the major impacts of the grounding by reestablishing the physical structure of the coral reef community and reducing coral mortality.

The 97-meter *Fortuna Reefer* grounded near a Commonwealth of Puerto Rico Natural Reserve off the west coast of Mona island. The vessel injured a barrier reef that extends approximately 16 kilometers from the eastern end of the island along the southern coast and around to the northwest. The reef is populated with large, branching "old growth" elkhorn corals (*Acropora palmata*), which were injured by the grounding.

The remoteness of the grounding site hampered salvage efforts and the vessel remained aground for eight days. Most of the 380,000 liters of heavy fuel oil and 125,4000 liters of marine diesel fuel aboard the *Fortuna Reefer* were removed before extracting the vessel from the reef. While no significant amount of oil was released, the grounding and subsequent salvage activities caused a swath of physical damage to the reef surface, measuring approximately 270 meters in length by 15 to 30 meters wide.

STATE AND TERRITORIAL PLANS TO FIGHT RUNOFF POLLUTION GET FEDERAL NOD

Seventeen state and territories plan to control water pollution from wide-spread "nonpoint" sources have received initial conditional approval from the federal government. Rhode Island, Massachusetts, Wisconsin, Amercian Samoa, Northern Marianas Islands, Virgin Islands, Guam, Delaware, Florida, Maryland, Pennsylvania, New Hampshire, Mississippi, New New Jersey, Puerto Rico, New York and Michigan were the first U. S. coastal and Great Lakes states and territories to have such plans conditionally approved by NOAA and the Environmental Protection Agency (EPA) under a program designed to improve the environmental health of coastal areas.

Nonpoint pollution, as the name implies, includes widely scattered and cumulative sources such as runoff from urban streets and parking areas, agriculture, forest harvesting activities, marinas and recreational boating activities, and impacts from the construction and maintenance of dams, channels, and other alterations of natural systems.

"The recent outbreaks of *Pfiesteria piscicida* in mid-Atlantic states are the types of problems nonpoint source pollution plans are intended to address," said Dr. Nancy Foster, director of NOAA's National Ocean Service. "Nonpoint source pollution is suspected as contributing to conditions that led to *Pfiesteria*-related fish kills and health problems. We've seen growing problems with *Pfiesteria* and other harmful algal blooms in areas around the nation, and nonpoint pollution is suspected as playing a role in many of these cases as well. State nonpoint source pollution plans are an important step toward protecting these environments and maintaining healthy, productive and enjoyable waterways and coastal areas."

State coastal nonpoint programs are designed to restore and protect coastal resources by reducing sources of polluted runoff that can severely degrade coastal water quality and near-shore areas. Polluted coastal waters can result in closure of beaches to swimming, restrictions on shellfish harvesting, and impacts to fisheries. Consequently, coastal water quality has significant implications for both coastal environments and economies.

Management measures in the state plans address a broad

spectrum of nonpoint pollution sources and are part of a growing national recognition of the need to better control the amount of diffuse sources of pollutants that impact our nation's waters. The NOAA and EPA approvals, issued as "findings," identify many existing state programs that are being used to address nonpoint pollution problems as well as conditions the state will address to complete development of its program. Findings for plans from several other coastal states, territories and commonwealths are expected soon.

The nonpoint pollution plans are part of a broader, overall coastal zone management program coordinated through NOAA with ocean and Great Lakes coastal states and territories. Development of plans specifically aimed at coastal nonpoint pollution was authorized in the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA).

The Office of Ocean and Coastal Resource Management in NOAA's National Ocean Service and EPA expect to conditionally approve all 29 state and territorial programs in early 1998.

NATIONAL MARINE FISHERIES SERVICE URGES STATE PARTICIPATION AS IT USES ENDANGERED SPECIES ACT TO PROTECT STEELHEAD IN FOUR WESTERN STATES

The National Marine Fisheries Service on August 15th announced Endangered Species Act (ESA) protection for five populations of Pacific coast steelhead, and urged western states to become active participants in finding ways to best manage the impacts of the listing. "There is no dispute that these fish are in serious trouble," said Terry D. Garcia, Acting Assistant Secretary for Oceans and Atmosphere. "Our commitment to salmon and steelhead conservation is clear: we must restore these magnificent fish. The law requires it, common sense calls for it, and our own sense of what constitutes a strong economy and healthy ecosystem dictate it."

"Extinction is not an option," Mr. Garcia added. "Our interest is in restoring these fish by using the enormous flexibility of the Endangered Species Act to enlist a full array of options to get the job done. This is an opportunity to innovate and to explore new approaches. Whether and to what extent we seize these opportunities is the choice that we collectively face. We invite the states to seize this opportunity and to work with us to find creative solutions as we take the next steps required by the ESA process."

Listed as "endangered," meaning they are at risk of becoming extinct in the foreseeable future, are steelhead in the Upper Columbia River from the Yakima River upstream to Chief Joseph Dam, and in Southern California from the Santa Maria River to just south of Malibu Creek, north of Los Angeles.

Listed as "threatened," meaning they are likely to become endangered in the foreseeable future, are steelhead in the Snake River Basin (encompassing parts of Idaho, Washington, and Oregon), Central California Coast and the South-Central California Coast. In addition, the fisheries service said it would defer for six months a decision on five other steelhead populations in Oregon, Washington and California because there is considerable scientific disagreement about the status of the stocks.

U.S. BANS BLUEFIN TUNA IMPORTS FROM THREE NATIONS FISHING IN VIOLATION OF INTERNATIONAL TUNA AGREEMENT

The United States is prohibiting all imports of Atlantic bluefin tuna caught by vessels from Panama, Honduras and Belize because the fishing activities of the three countries are undermining international efforts to manage and conserve the species, officials of the National Marine Fisheries Service said on August 21st

This is the first time that the United States has implemented internationally agreed sanctions against countries found to violate conservation rules of the International Commission for the Conservation of Atlantic Tunas (ICCAT). The U.S. action will ban bluefin imports from these three countries. All 24 ICCAT-member countries agree to the ICCAT recommendations and are expected to implement restrictions of their own.

While no Atlantic bluefin tuna are currently imported into the United States from these countries, a formal prohibition against such imports was necessary to close the potential market and to support the anticipated actions of other ICCAT member countries such as Japan. Japan imports about 90 percent of the world's bluefin tuna harvest.

According to ICCAT members, Panama, Honduras and Belize have repeatedly ignored efforts to cooperate with ICCAT bluefin tuna conservation and management measures. In 1995, the three countries were notified by ICCAT that failure to rectify the fishing activities of their vessels could result in the imposition of trade restrictive measures. At its 1996 meeting ICCAT reviewed additional trade data, vessel-sighting information, and port inspection information that indicated that vessels of Belize, Honduras and Panama continued to fish for bluefin tuna, and ICCAT again determined that these fishing activities were undermining ICCAT conservation efforts.

In order to conserve and manage North Atlantic bluefin tuna, ICCAT adopted two recommendations at its 1996 meeting requiring its members to take appropriate measures to prohibit the importation of Atlantic bluefin tuna and its products in any form harvested by vessels from Belize, Honduras and Panama. The U.S. action against Belize and Honduras takes effect immediately. However, ICCAT determined that the import prohibition against Panama would be delayed until January 1st to allow Panama to present evidence that it has brought its fishing practices for Atlantic bluefin tuna into consistency with ICCAT conservation and management measures. The delay in implementation of trade restrictions for Panama recognizes Panama's expressed intent to rectify the improper fishing activities of its vessels.

CHECK NOAA LEGISLATIVE AFFAIRS HOMEPAGE FOR THE LATEST NOAA-RELATED FLOOR STATEMENTS, FINAL HOUSE AND SENATE ACTION AND TESTIMONY DELIVERED BY SENIOR NOAA OFFFICIALS:

HTTP://WWW.NOAA.GOV/NOAA-OLA

SCIENTISTS EXPLORE LITTLE KNOWN DEEP-WATER CORAL REEF IN THE FLORIDA KEYS NATIONAL MARINE SANCTUARY

Scientists operating from the vessel *Tiburon*, out of Key West, were the first researchers to explore a little known deep-water coral reef with spectacular coral cover during a recent reconnaissance survey in a remote area west of the Dry Tortugas islands, NOAA announced . Because of its location, the reef has been protected from the human-caused degradation that has affected other reefs in shallower waters of the Keys.

Scientists from NOAA were joined by scientists from the Florida Department of Environmental Protection and the Department of Interior's U.S. Geological Survey, which sponsored this multi-agency effort.

"The corals look like gigantic mushrooms gone wild," said Jim Bohnsack of the National Marine Fisheries Service's Science Center in Miami. "The structural complexity of the reef made ideal fish habitat. When we first descended it appeared that there were hardly any fish present, but after a few minutes they began popping out from all parts of the reef."

The scientific team was surprised by the reef's size and the fact that it is densely covered with coral.

"The abundance and cover of coral in this area is as high as any in the Keys, and it confirms the importance of coral reef habitats in the vicinity of the Dry Tortugas," said G.P. Schmahl, manager of the lower region of the sanctuary and one of the researchers on the trip. "Due to its location, it has been protected from degradation by human influences, and it could serve as a control area to compare to other reefs in the Florida Keys."

Schmahl pointed out that the reef, which lies in 18 to 30 meters of water, is similar to another coral reef located in the Gulf of Mexico: the Flower Gardens National Marine Sanctuary off the coast of Texas. "This is a spectacular, healthy resource of the sanctuary, and it needs to be studied and protected."

The reef may have been overlooked in the past because it appears to be relatively flat on depth sounders and is too deep to be seen from the surface. The reef was previously known to only a handful of divers as "Sherwood Forest," because during early morning dives the corals are mysterious looking and reminiscent of a forest canopy. Low light conditions at these depths causes corals to grow in a unique, flat, plate-like form. The reef profile is remarkably uniform, which at first gives a false impression of a flat bottom that is, in fact, 1.5 meters above the real bottom. The subsurface of the reef is a maze of valleys and intricate caves and tunnels between corals.

"We were only able to conduct a preliminary survey of the site because of its depth, remoteness, and the fact that the upper 15 meters of the water column was filled with high densities of stinging jellyfish. Several divers suffered from painful stings," said Bohnsack. "We speculate that the reef is very old and exists only because of the unique local conditions. Normally clear water allows sufficient light for coral growth and the depth of the reef apparently protects it from storms and extreme hot summer or cold winter surface waters in the Gulf of Mexico."

The discovery was made as scientists from NOAA's Florida Keys National Marine Sanctuary, Southeast Fisheries Science Center and NOAA Corps; the Florida Department of Environmental Protection's Florida Marine Research Institute; and the U.S. Geological Survey's Biological Resources Division were mapping and collecting data on coral, sponge and fish populations from many sites in the Dry Tortugas National Park and the western Florida Keys National Marine Sanctuary.

CALTRANS WORKING TO MAKE SAN FRANCISCO BAY BRIDGE EARTHQUAKE SAFE WITHOUT HARMING NEIGHBORING SEA LIFE; AGENCY SEEKS COMMENT ON AUTHORIZATION

The California Department of Transportation has proposed ways to minimize disturbance of seals and sea lions as it conducts retrofit construction to the Richmond-San Rafael Bridge in San Francisco Bay, the federal agency responsible for researching and protecting marine mammals, NOAA announced.

The bridge is being retrofitted to withstand a future severe earthquake. As construction between piers 52 and 57 of the bridge may potentially disturb seals and sea lions resting at Castro Rocks, the California Department of Transportation (CALTRAN) applied for an incidental harassment authorization under the Marine Mammal Protection Act.

NOAA's National Marine Fisheries Service has preliminarily determined that the CALTRANS activity will not result in more than an incidental disturbance of small numbers of harbor seals and possibly California sea lions and would have only a negligible impact on these stocks. The agency is seeking comment on the CALTRANS application and proposed authorization.

To protect adult seals and pups resting at Castro Rocks, CALTRANS will limit construction noise levels there during the pupping/ molting season, will not work on piers and pilings from piers 52 through 57 between February 1st and June 30th, and will not deploy watercraft during the year within an exclusion zone located between piers 52 and 57 on the south side of the bridge, except when construction equipment is required for retrofitting piers 52 through 57. This exclusion area will be labeled as a controlled access area on construction plans and will be marked off with buoys located 60 meters from the rocks. Trained observers will monitor harbor seal activities at Castro Rocks during construction.

MAINE FIRM GETS $3.75 MILLION CONTRACT FOR DIGITAL CHARTS

NOAA has awarded a contract of $3.75 million to BSB Electronic Charts, LLP, of Bangor, Maine, to provide digital versions of official NOAA navigation charts for use by U.S. government agencies.

Known as "raster nautical charts" and displayed on computer monitors, these electronic navigation tools are exact replicas of the traditional paper nautical charts produced by NOAA. The computer-based charts can be used in conjunction with

other navigation aids such as the global positioning system (GPS) to provide ships with instantaneous, accurate positions and navigation information.

BSB Electronic Charts produces raster nautical charts in CD-ROM format for sale to the public and shipping industry under an exclusive arrangement for the use of NOAA's original digital chart files. The new contract will be available for use by all U.S. federal agencies wishing to purchase raster charts.

SCIENTISTS DEVELOP NEW MAP OF THE WORLD'S SEA FLOORS

Scientists have used gravity data from satellites in addition to depth soundings from ships to produce a more defined, high-resolution map of the world's ocean floors, NOAA announced September 24th.

The new map, which looks similar to one the scientists published in 1995, provides estimations of the ocean depths from gravity data from satellites. The 1995 map was based on gravity data, but did not provide estimations of ocean depths.

Scientists Walter H.F. Smith of NOAA's National Oceanographic Data Center and David T. Sandwell of the Scripps Institution of Oceanography, University of California, San Diego, reported on their project in the September 26th issue of *Science* magazine.

Conventional sea floor mapping using echo sounding data from ships has been difficult because of the large gaps between surveys in remote areas. "There are places as large as the State of Oklahoma where no soundings are available," said Dr. Smith. "Traditionally, bathymetric contours are drawn by hand so that human intuition (or prejudice) fills the gaps in coverage," Drs. Smith and Sandwell write in *Science*. "Recent developments allow a new approach to this problem." Drs.Smith and Sandwell used gravity data from satellites to estimate depths in unsurveyed areas, thus filling the gaps in the map in an objective and high-resolution manner.

The new topography reveals all of the intermediate and large-scale structures of the ocean basins, including new mountain ranges such as the Foundation Seamounts in the South Pacific. These were not found by conventional mapping but were revealed by the satellite gravity data. Drs. Smith and Sandwell showed that uncharted seamounts are a significant source of topographic variation, and information from satellite gravity can reduce the error in estimated topographic variation by more than half.

Knowledge of sea floor topography is vital for understanding physical oceanography, marine biology, chemistry and geology. Topography influences currents, tides, and mixing and upwelling of nutrient-rich water. The new topographic features portrayed by Drs. Smith and Sandwell reveal new fish habitats and should influence computer simulations of ocean circulation, which are used to forecast global climate change.

The map can be viewed on the World Wide Web at:

http://www.ngdc.noaa.gov/mgg/fliers/97mgg03.html

NOAA UPDATES CONGRESS ON STATUS OF MARINE FISHERIES: "ALMOST 1/3 OF MARINE SPECIES REVIEWED ARE OVERFISHED."

The National Marine Fisheries Service in a report to Congress said that 96 marine fish species reviewed are "overfished" or approaching an overfished condition, while another 183 species have not been overfished. Data from the report will be used by Regional Fishery Management Councils as they prepare plans to end overfishing and begin to rebuild the depleted fisheries, NOAA officials announced on October 2nd.

"Unfortunately, we expect the 'overfished' figures to increase as definitions in fishery management plans are amended to conform to the Magnuson-Stevens Fisheries Management and Conservation Act," said Terry Garcia, Acting Assistant Secretary for Oceans and Atmosphere and Deputy NOAA administrator. "However, we expect the eight regional councils responsible for managing these fisheries will begin to prepare rebuilding plans that will ultimately improve the stocks and provide more fish for consumers and recreational fishermen."

The report and marine fish stock rebuilding efforts are required under the amendments to the Magnuson-Stevens Act passed in 1996. The Regional Fishery Management Councils are required to reassess each Fishery Management Plan (FMP) - plans that are developed by the councils to manage fishery resources in federal waters - for compliance with overfishing provisions.

This year's analysis of fisheries stocks (based on the definition of overfishing contained in 1996 regulations) is considered to be understated and represents a minimum number of overfished fisheries. The 1998 and 1999 reports will use fishery-specific definitions based on Congress's definition of "overfished" contained in the Magnuson-Stevens Act, and are expected to increase the number of fisheries considered overfished.

Currently, stock levels are evaluated by examining recruitment overfishing - which assesses the status of juvenile fish populations. Future assessments will use the new Magnuson-Stevens Act definition of overfishing that measures stock levels compared to the levels needed to ensure maximum sustainable yield for each species on a continuing basis.

Based on the identifications made in this report, the councils are now required to develop programs to end overfishing and rebuild some 76 overfished species, and to prevent overfishing from occurring for the 10 species that are approaching an overfished condition. Nineteen FMP amendments will need to be submitted for approval by the Commerce Secretary within the next year. An additional 10 species not currently covered by FMPs must have plans developed to end overfishing and rebuild the affected fisheries in the same time frame.

Another 448 stocks are identified as unknown in the report. Of those, 428 stocks are covered by FMPs while 20 stocks are not. Additional efforts to obtain information necessary to assess these stocks will be required before their status can be determined. As the status of these stocks becomes known,

some will require rebuilding under existing FMPs while others will require that an FMP be developed.

ILLINOIS-INDIANA NAMED NATION'S 27TH SEA GRANT COLLEGE PROGRAM

NOAA on October 3rd designated Purdue University and the University of Illinois "Sea Grant colleges" and named the joint Illinois-Indiana Sea Grant program the nation's twenty-seventh Sea Grant college program.

Speaking at the Great Lakes Commission meeting in Chicago, Under Secretary for Oceans and Atmosphere Dr. D. James Baker said, "The University of Illinois and Purdue University received their designation as Sea Grant colleges because, working together, they have developed an excellent inter-disciplinary program of research, education and outreach that addresses the needs of the Great Lakes region and the goals of the nation.

"President Lyndon B. Johnson signed the National Sea Grant College Program into law thirty-one years ago. Today, Sea Grant is one of NOAA's most important national research and educational efforts, one that enjoys broad, bipartisan support in Congress. I firmly believe that the Sea Grant Program is a critical link in NOAA's responsibility to document and understand the global ecosystem. This is especially important in Illinois and Indiana because of the need to foster stewardship, conservation and appropriate use of the resources of Lake Michigan and the Great Lakes region."

Sea Grant college status is awarded only after a Sea Grant program has been judged to have maintained a high quality and balanced program of research, education and outreach related to ocean, Great Lakes and coastal resources. The joint Illinois-Indiana program was specifically cited for its research excellence in aquaculture and water quality and for its work on the control of zebra mussels and other nonindigenous species.

The core of the National Sea Grant College Program comprises 29 Sea Grant Colleges and institutions, which encompass a wide network of approximately 300 colleges, universities, research institutions and marine organizations. Sea Grant works in partnership with industry, the federal government and state governments to conduct coastal and marine research, education and outreach.

SCIENTISTS BEGIN FIVE-YEAR STUDY OF LAKE MICHIGAN MUD PLUME

A team of scientists from six federal agencies and a dozen universities and research institutes has begun deploying instruments in a five-year study of a massive plume of muddy water, 19 kilometers wide and 360 kms long, that appears each year along the southern end of Lake Michigan from Milwaukee to Grand Haven, MI, announced NOAA.

Although lasting only about one month each year, the plume is suspected to have a profound impact on the ecology of Lake Michigan and may be the major mechanism for re-suspending and transporting both nutrients and contaminants in the lake.

Clearly visible in NOAA satellite imagery, the plume is believed to consist of over a million metric tons of very fine clay particles and sediments eroded from the western shore of Lake Michigan in late winter and early spring. Scientists think the eroded bluff material is first deposited temporarily along the shoreline, then re-suspended in the water column during winter storms.

"The 45 scientists involved in the Episodic Events - Great Lakes Experiment, or EEGLE for short, expect to develop the most sophisticated research models ever created for the Great Lakes, models that should provide a more realistic assessment of how nutrients and contaminants in the sediments continue to recycle within the lake and control its ecosystem," said Brian Eadie, NOAA scientist and the project's coordinator.

The $13.75-million study is sponsored primarily by NOAA and the National Science Foundation.

NOAA AWARD RECIPIENTS ANNOUNCED

WALTER B. JONES MEMORIAL AND NOAA EXCELLENCE AWARDS FOR COASTAL AND OCEAN RESOURCE MANAGEMENT

<<*For broader description of event see p. 7*>>

NOAA on October 22nd honored this year's recipients of the Walter B. Jones Memorial and NOAA Excellence Awards for Coastal and Ocean Resource Management.

The awards program honors excellence in unique coastal and ocean resource management programs, as well as in public and private endeavors to conserve America's coasts."

"Estuarine and coastal wetlands are decreasing nationwide by an average of 49 square kilometers per year," said Jeffrey R. Benoit, director of NOAA's Office of Ocean and Coastal Resource Management. "Marine habitats are disappearing at an alarming rate, underscoring the fact that the nation's ocean and coastal resources are at serious risk. The award recipients are the folks who are helping to change the quality of our oceans and coasts.

The Jones award winners have demonstrated the positive impact public and private organizations and citizens can have in reversing these problems. The following were chosen from a pool of nearly 100 qualified nominees by an independent panel of judges. The criteria for evaluation are based on innovative approaches in coastal zone management —helping to maintain coasts and ocean resources and balance the needs of these resources with human use.

COASTAL STEWARD OF THE YEAR

Cynthia A. Zipf, Executive Director of Clean Ocean Action, Sandy Hook Highlands, New Jersey

EXCELLENCE IN LOCAL GOVERNMENT:

Kenai Peninsula Borough, Soldotna, Alaska

Town of Rye, New Hampshire

Natural Resources Department of the Bad River Band of Lake Superior Chippewas, Odanah, Wisconsin

Manatee County Government Planning Department,

Bradenton, Florida

Volusia County, DeLand, Florida

VOLUNTEER OF THE YEAR

Susan Jordan, League for Coastal Protection, Manhattan Beach, California

EXCELLENCE IN COASTAL AND MARINE GRADUATE STUDY

DoSoo Jang, University of Delaware, Newark, Delaware

Lillian Ferguson, University of Washington, Seattle, Washington

Kristopher A. Pickler, Duke University, Durham, North Carolina

John Field, University of Washington, Seattle, Washington

EXCELLENCE IN PROMOTING CULTURAL AND ETHNIC DIVERSITY

Pat Flanagan, San Diego Museum of Natural History, Imperial Beach, California

NON-GOVERNMENTAL ORGANIZATION OF THE YEAR

Friends of the Bay, Oyster Bay, New York

EXCELLENCE IN COASTAL ZONE MANAGEMENT

Leslie Jan Strnad, California Coastal Commission, Corralitos, California

EXCELLENCE IN ESTUARINE RESEARCH RESERVE MANAGEMENT

Michael Graybill, South Slough National Estuarine Research Reserve, Charleston, Oregon

EXCELLENCE IN MARINE SANCTUARY MANAGEMENT

Edward Ueber, Gulf of the Farallones National Marine Sanctuary, San Francisco, California

EXCELLENCE IN BUSINESS LEADERSHIP

BP Exploration Inc., Gulf of Mexico (BPX), Houston, Texas

From dedicated individuals to entire communities, this year's 18 honorees embody the hard work and dedication that are vital to solving our coastal problems.

For example, New Jersey's Cynthia Zipf plays a pivotal role in influencing state and national legislation and she has mobilized thousands of people to become coastal stewards. Alaska's Kenai Peninsula Borough worked with federal and state governments to achieve a balance between human use and conservation of the world- renowned natural resources of the Kenai River.

Rep. Walter B. Jones Jr. (R-NC), son of the late veteran Representative, and Dr. D. James Baker, Under Secretary for Oceans and Atmosphere and NOAA administrator, presided over the Capitol Hill ceremony.

Several of the awards are named after the late Congressman Walter B. Jones, former chairman of the House Committee on Merchant Marine and Fisheries, who in 1990, under the reauthorization of the Coastal Zone Management Act (CZMA), granted NOAA the authority to honor American people and organizations who dedicated countless hours and energy to preserving coastal and ocean resources.

The CZMA created the National Coastal Zone Management Program, a unique and voluntary partnership of federal and state governments, to provide a balance between land and water uses in coastal zones and conservation of fragile coastal resources. The CZMA also created the National Estuarine Research Reserve System, a national system of estuarine reserves that represent coastal and estuarine habitats and provide long-term research and education to improve coastal management decision-making. This year's ceremony is especially significant as NOAA celebrates the 25th anniversaries of CZMA and the National Marine Sanctuaries Act. Under the sanctuaries act, twelve marine sanctuaries have been created for preserving or restoring such areas for their conservation, recreational, ecological or esthetic values.

U.S. NEGOTIATES FIRST INTERNATIONAL REDUCTION IN MARLIN HARVEST; OTHER CONSERVATION AGREEMENTS AT ICCAT

First-ever mandatory conservation measures for Atlantic blue and white marlin have been adopted at the annual meeting of the International Commission for the Conservation of Atlantic Tunas. Proposed and negotiated by the U.S. delegation, the ICCAT agreement requires countries to reduce landings of these severely overexploited marine species by at least 25 percent, NOAA announced on November 21st.

"We are extremely pleased to have taken a major and historic step to reduce marlin mortality and to have triggered the long process of stabilizing and rebuilding these stocks," said Will Martin, NOAA's Deputy Assistant Secretary for International Affairs. "And, we note the high degree of cooperation between recreational and commercial sectors in achieving this step." Mr. Martin headed the delegation of government officials, industry representatives, recreational interests, environmental groups and Congressional staff.

ICCAT continued to take steps to increase compliance with existing conservation and management measures by both member and non-member countries. Last year's historic compliance agreement on swordfish was extended to cover south Atlantic swordfish quotas. A new agreement regarding member nations' compliance with regulations on undersized fish was also adopted. In addition, a package of measures on monitoring and compliance was adopted, including an ICCAT port inspection program, restrictions on transshipments at sea, and a pilot program to implement vessel monitoring systems for high-seas vessels. ICCAT initiated diplomatic approaches to several non-member countries whose fishing activities are of concern to ICCAT.

ICCAT also adopted a sharing arrangement for south Atlantic swordfish, together with a total allowable catch (TAC) and country quotas for 1998 through 2000, representing the first time quotas have been imposed for this fishery. South Atlantic albacore catches are to be curtailed through a TAC to be shared among four countries, with minor fishing countries limiting their catches according to bycatch allowances or a cap relative to recent levels.

Concern over the status of Atlantic bigeye tuna stocks led to several measures on the conservation and management of this species. These included registration and possible limits in the future on the number of commercial vessels greater than 80 gross weight tons targeting bigeye tuna, and a 35 percent reduction in the catches of Atlantic bigeye tuna by Taiwan.

"While we have many miles to go before Atlantic tuna resources are stabilized and recovered, ICCAT's actions at this year's meeting represent the type of serious, constructive work that will eventually lead to our ultimate goals," Mr. Martin said. ICCAT, a 25-nation organization charged with the management of Atlantic tunas, swordfish, marlins and sailfish, met in Madrid, November 14th-21st.

ALPENA VOTERS REJECT SUPPORT FOR PROPOSED THUNDER BAY NATIONAL MARINE SANCTUARY

In an Advisory Referendum, voters in Alpena, MI, rejected by 2.5:1 margin city support for the proposed Thunder Bay National Marine Sanctuary, The Alpena News reported. The referendum was placed on the ballot by the Alpena Municipal Council to gauge the feeling of its constituents in this matter before making a decision whether to support the proposed designation. Karen Brubeck and Ellen Brody, both NOAA representatives, responded to the results of the referendum, saying although the vote was overwhelmingly negative, the federal agency will continue to work with the community to see how it can make the proposed sanctuary more acceptable to the public.

"It is NOAA's belief that at least some of the voters are opposed to any federal regulatory presence in Michigan waters, regardless of potential benefits to the communities surrounding Thunder Bay," Brubeck and Brody wrote in a prepared statement.

"In addition to considering the results of this non-binding advisory vote, NOAA will review the recommendations of the Sanctuary Advisory Council, comments submitted on the Draft Environmental Impact Statement/Draft Management Plan, and comments provided at the three public hearings. In consultation with the state, NOAA will make a determination on whether to continue with this proposal."

CHECK NOAA LEGISLATIVE AFFAIRS HOMEPAGE FOR THE LATEST NOAA-RELATED FLOOR STATEMENTS, FINAL HOUSE AND SENATE ACTION AND TESTIMONY DELIVERED BY SENIOR NOAA OFFFICIALS:

HTTP://WWW.NOAA.GOV/NOAA-OLA

NOAA ACTING ASSISTANT SECRETARY SUBMITS NATURAL RESOURCES DAMAGES STATEMENT OPPOSING REVISED SUPERFUND LEGISLATION AT SENATE SUBCOMMITTEE HEARING

Acting Assistant Secretary for Oceans and Atmosphere Terry Garcia submitted a written statement on the Administration's position on the Natural Resources Damages (NRD) provisions for a Senate hearing on Superfund Reauthorization legislation. The hearing was held September 4th by the Subcommittee on Superfund, Waste Control and Risk Assessment of the Environment and Public Works Committee (Chairman Robert Smith, R-NH). Environmental Protection Agency Administrator Carol Browner provided the oral testimony for the Administration on the draft Chairman's Superfund Reauthorization mark dated August 28th.

Mr. Garcia said Chairman's mark "reflect a concerted effort by the Committee to respond to some of the strong" Administration objections and includes "much-improved provisions concerning consistency between natural resource restoration and response." However, "the Administration would (still) have to oppose this proposal strongly if it were to be considered for mark up in its current form," Mr. Garcia said. He said the Chairman's mark includes the former bill (S 8)'s "most odious feature: unwarranted restrictions on the range of values that trustees may consider in deciding the appropriate steps to achieve full restoration of the losses that communities suffer…." The draft also did not address statute of limitation concerns, he said.

The Chairman's mark was revealed on August 29th. S 8 is the bill Committee Chairman John Chafee (R-RI) and Superfund Subcommittee Chairman Smith introduced in January.

NOAA TESTIFIES AT HOUSE EL NINO HEARING

Michael Hall, Director of NOAA's Office of Global Programs, testified at a September 11th House Science Energy and Environment Subcommittee (Chairman Ken Calvert, R-CA) hearing on "Preparing for El Nino." The hearing examined the state of science regarding understanding of El Nino events, science's ability to forecast them, the El Nino's effects on climate in the United States, and ways in which state, local, and federal agencies and businesses can use these forecasts in planning and mitigation. Dr. Hall appeared on a panel with Dr. Tim Barnett, Research Marine Physicist, Scripps Institution of Oceanography, La Jolla, CA and Dr. Andrew R. Solow, Director, Marine Policy Center, Woods Hole Oceanographic Institute, Woods Hole, MA. A second panel featured Michael Armstrong, Associate Director, Office of Mitigation, Federal Emergency Management Agency; Dr. I. Miley Gonzalez, Under Secretary for Research, Education, and Economics, U. S. Department of Agriculture, and Douglas Wheeler, Secretary, California State Resources Agency, Sacramento.

In his written remarks, Dr. Hall said that since March, 1997, strong warm El Nino conditions have developed in the tropical Pacific. "There are some indications that weather patterns over the United States have been substantially influenced by

the El Nino underway at this time. The delayed onset of summer rains in the Southwest and the somewhat wetter and cooler than normal conditions over the northern Rockies and sections of the Great Plains, as well as the drier than normal conditions in the mid-Atlantic states, are features that have been observed during past El Nino episodes."

Dr. Hall said past El Nino events have resulted in severe storms along the West Coast, Midwest and Inter-Mountain flooding, a Midwest drought, increased Hawaiian typhoons, disruption of West Coast fisheries, and Mississippi River floods. Beneficial impacts have included decreased East Coast hurricanes, Northeast energy savings due to milder than average winters, enhanced streamflow and seasonal snow water runoff in the Southwest, and increased fish catches in British Columbia and Alaska.

HOUSE SUBCOMMITTEE HOLDS HEARING ON COMPREHENSIVE REVIEW OF FISHERIES SERVICE

The House Resources Committee Subcommittee on Fisheries Conservation, Wildlife and Oceans (Chairman, James Saxton, R-NJ) held a September 11th hearing to "comprehensively review the management of our Nation's fisheries by the National Marine Fisheries Service (NMFS)." NMFS Director Rolland Schmitten in written testimony said "historically, marine fishery resources were falsely assumed to be so vast that the possible impacts of fish to be so small that fishing was essentially unregulated….NMFS is now faced with the almost impossible task of stopping and, indeed, reversing the expansion of our capabilities to capture fish—an expansion which has been so diligently pursued in the U.S." Mr. Schmitten said "we are indeed learning from our mistakes" with the passage of the Stevens-Manguson Act. The Act makes rebuilding of overfished stocks a priority.

NMFS scientists have done a "remarkable job" providing data necessary to document the need to restrict harvests. Further, "we are moving from an era when any gear could be used unless specifically prohibited to a time when all gear will be prohibited unless specifically allowed." He added: "only when our capacity to harvest fish more closely matches the fish's capacity to replace that harvest will we have achieved sustainable fisheries."

"I am optimistic that the stage has been set for converting this country's marine stocks into healthy, productive and sustained fisheries in the very near future," Mr. Schmitten concluded.

STATE DEPUTY ASSISTANT SECRETARY TESTIFIES AT U.S.-CANADA PACIFIC SALMON TREATY HEARING

Mary Beth West, Deputy Assistant Secretary of State for Oceans, Science, and Technology, was the lead government witness at the September 18th hearing on the status of the U.S.-Canada Pacific Salmon treaty before the House Resources Committee Subcommittee on Fisheries Conservation, Wildlife and Oceans (Chairman, James Saxton, R-NJ). She noted there are fundamental differences in the way that the U.S. and Canadian government believe that the dispute over differences concerning the interpretation and application of the 1985 Pacific Salmon Treaty should be resolved. The U.S., she said, believes that involvement in stakeholders is the best opportunity to achieve a resolution. Canada, on the other hand, believes that government-to-government negotiations as the real forum for resolution. Secondly, because of the complexity of the Pacific salmon issue bringing all the issues to the table and finding solutions in a reasonable time has proven to be very difficult. If negotiations are not successful then some urge that the State Department begin consultations with the Congress over the usefulness of the treaty. "This is a decision, I hope that we do not have to face…."

NOAA TESTIFIES ON RECENTLY INTRODUCED ENDANGERED SPECIES ACT LEGISLATION

On September 23rd, the Senate Environment and Public Works Committee (Chairman, John Chafee, R-RI) held a hearing on S 1180, the Committee's bipartisan bill to reauthorize the Endangered Species Act (ESA).

In their opening statements, Members applauded the bipartisan effort citing the bill's high points such as cooperation with private landowners (through agreements such as "No Surprises" and "Safe Harbor" which add predictability to the process), increased state participation, new emphases on recovery planning, and an expanded consultation process.

Sen. Dirk Kempthorne (R-ID) pointed out that there was wide agreement that the Act could be improved, and that the Members had crafted a balanced proposal that saved species and was good for people in communities. Ranking Committee Democrat Sen. Max Baucus (D-MT) pointed out that the bill does not include harmful provisions on takings, water rights, listing standards, and takings standards; and that it does not harm the underpinnings of the ESA. Some Members stated that they would like to see property rights, water rights, and other language in the bill, despite the present consensus on the bill. Chairman Chafee reiterated that it was important to keep the consensus.

Acting Assistant Secretary for Oceans and Atmosphere Terry Garcia's testimony reemphasized that recovery must be the goal for the endangered species, that the attempts to act early and coordinate with landowners was intended to "keep the species out of the emergency room." He highlighted the successes of the Oregon Plan done to prevent a coho salmon listing, and added that the funding in the reauthorization bill is essential for its success.

Most of the questions in the hearing were directed to fellow panelists Fish and Wildlife Director Jamie Rappaport Clark and Montana Governor Marc Racicot, but Terry Garcia answered inquiries about NOAA's support of the legislation, cooperation between agencies, and funding. The Administration stated its support of the legislation contingent on several technical changes. These changes were made shortly after the hearing. Also, the bill goes far beyond cooperation between agencies because it is focused on recovery, and allows the states to come forward to do this job. NOAA has done estimates on the funding needed to accomplish the bill's mandates, and the amounts are higher than originally thought. It will take additional Executive Branch staff to meet

its many deadlines. Additional Senators in attendance included James Inhofe (R-OK), Craig Thomas (R-WY), Jeff Sessions (R-AL), Wayne Allard (R-CO, Ron Wyden (D-OR), and Joseph Lieberman (D-CT).

NOAA ACTING ASSISTANT SECRETARY TESTIFIES AT HOUSE *PFISTERIA* HEARING

Acting Assistant Secretary for Oceans and Atmosphere Terry Garcia testified at a September 25th hearing on the human health problems posed by *Pfiesteria piscicida* before the House Government Reform and Oversight's Subcommittee on Human Resources (Chairman Chris Shays, R-CT). Fish kills resulting from *Pfeisteria* have closed three rivers in Maryland and have spread to Virginia and North Carolina and other Mid-Atlantic states. It has created an economic crisis for Chesapeake Bay watermen because of consumer fears that even fish captured in non-affected areas are contaminated. Mr. Garcia appeared on a panel which included officials from the National Institutes of Health, the Food and Drug Administration, the Centers for Disease Control and Prevention, and the Environmental Protection Agency (EPA). Maryland Governor Parris Glendening also testified.

In his written testimony, Mr. Garcia said that damage caused by *Pfiesteria*-like outbreaks in coastal waters have caused an estimated $1 billion in economic losses during the past decade. "While the specific environmental conditions which result in blooms vary from species to species, the increasing coast-wide trends in bloom occurrence and intensities suggest we should look for some common underlying causes, such as increased levels of nutrients in coastal waters." Mr. Garcia emphasized NOAA's role in conducting the research necessary for significant and lasting progress in addressing this threat from toxic blooms, and indicated that NOAA, with EPA, is leading the development of a National research strategy to coordinate the long-term response to these crises by Federal programs. He continued "as evidence grows that these and other blooms are stimulated by the availability of on-point sources of nutrients, our efforts with the EPA and the states through NOAA's Coastal Zone Management's Non-point Pollution Control will be critical."

CONFIRMATION HEARING HELD FOR ACTING ASSISTANT SECRETARY FOR OCEANS AND ATMOSPHERE

The Senate Commerce, Science and Transportation Committee (Chairman John McCain, R-AZ) on October 7th held a confirmation hearing for Terry Garcia, nominated to be NOAA's Assistant Secretary for Oceans and Atmosphere and Deputy NOAA Administrator. Mr. Garcia has been Acting in these positions since November 15th, 1997, and was NOAA's General Counsel prior to that. At the hearing, Senator McCain expressed interest in National Weather Service (NWS) modernization efforts. Mr. Garcia assured the Chairman that NOAA was committed to ensuring a cost effective, modernized NWS with no degradation of service. Sen. Conrad Burns (R-MT) indicated he was optimistic about the appointment because of Mr. Garcia's commitment to working with States and local communities in implementing the Endangered Species Act. Sen. Ron Wyden (D-OR) read from a letter from Oregon Governor John Kitzhaber that said "I can't say enough good things about Terry Garcia." Mr. Garcia worked with Oregon on a salmon recovery plan. Sen. John Breaux (D-LA) inquired about NOAA's plans to contract with private hydrographic vessels to reduce the backlog in nautical charting. Mr. Garcia explained that NOAA intends to contract out for much of this work, but needs to maintain an in-house capability in order to effectively evaluate and manage the data. Overall the hearing was positive.

NOAA PRESENTS DATA AT HOUSE RESOURCES SUBCOMMITTEE *PFESTERIA* HEARING

Acting Assistant Secretary for Oceans and Atmosphere Terry Garcia testified at an October 9th hearing on *Pfesteria* before the Fisheries Conservation, Wildlife and Oceans Subcommittee (Chairman James Saxton, R-NJ). The hearing focused on the role of harmful algal blooms as a contributing factor to the spread of toxic *Pfesteria.*

In his statement, Mr. Garcia pointed to one of a larger set of potentially harmful species that are apparently increasing in abundance and intensity in coastal waters, both here and abroad. These harmful algal blooms — including red tides in the Gulf of Mexico and the southeast; brown tides in New York and Texas; and shellfish poisonings in the Gulf of Maine, the Pacific Northwest, and Alaska — impact nearly every coastal state and have been responsible for an estimated $1 billion in economic losses over the past two decades. The blooms have decimated the scallop fishery in Long Island's estuaries, killed a billion fish in North Carolina estuaries, closed down various shell fisheries on Georges Bank and from North Carolina to Louisiana, and killed almost 150 Florida manatees. These harmful algae have been associated with the serious die-off of dolphins along the East Coast in 1987 and, without effective means to monitor for paralytic shellfish poisoning, over 48,000 kilometers of Alaskan shellfish waters cannot be harvested. Mr. Garcia emphasized NOAA's role in conducting this research necessary for significant and lasting progress in addressing this national threat, and explained that NOAA 's Coastal Ocean Program is leading a multi-agency research program on the Ecology and Oceanography of Harmful Algal Blooms, or ECOHAB, which represents the first federal interagency research program focused exclusively on determining factors responsible for blooms of harmful algae in U.S. coastal waters. ECOHAB is a partnership among NOAA, the National Science Foundation, EPA, and Office of Naval Research.

Mr. Garcia added: "I should also point out that excess nutrient loads, particularly nitrogen and phosphorus, are also responsible for a general overgrowth of algae in many coastal ecosystems. While these algae may not be toxic, their death and subsequent decay can lead to severe oxygen depletion in the bottom waters of many estuaries and coastal environments."

DR. BAKER TESTIFIES IN FAVOR OF NOAA CORPS DISESTABLISHMENT LEGISLATION; MEMBERS SAY FURTHER STUDY IS NECESSARY

Dr. D. James Baker, Under Secretary for Oceans and Atmosphere, testified on October 29th before the Senate Commerce Subcommittee on Oceans and Fisheries (Chairman Olympia Snowe, R-ME) in favor of Administration-supported legislation to disestablish the NOAA Corps. The legislation, S 877, was introduced by full Commerce Committee Chairman John McCain (R-AZ) on June 11th. Dr. Baker in his prepared testimony said:

"Two fundamental precepts support our proposal to disestablish the NOAA Corps: fair treatment of the officers and preserving the ability

of NOAA to continue to perform its essential missions. Disestablishment does not mean that the functions performed by Corps officers will disappear but rather that essential activities will be carried out by a civilian workforce." The Navy, the National Transportation Safety Board and the Environmental Protection Agency "perform functions similar to those handled by the NOAA Corps. These civilians serve on ships or are assigned with little notice to varied locations throughout the world – the same circumstances which underlie the Corps' responsibilities. We see no diminution of capability to provide ship and aircraft support services to NOAA programs as a result of the disestablishment," Dr. Baker said.

The NOAA Administrator said that disestablishment was cost-effective and could save up to $5 million annually based on the Corps actual payroll for 299 officers and the civilian workforce that would replace it. Dr. Baker said the one-time cost for disestablishment would be $13.3 million.

Members attending the hearing besides Sen. Snowe included Sens. Ted Stevens (R-AK), John Kerry (D-MA) and John Breaux (D-LA). All agreed that the expertise of the NOAA Corps is essential to NOAA's mission. Concern was expressed by all Members that the savings to the Federal Government by eliminating the NOAA Corps appeared to be minimal and further examination was necessary before any action would be taken to eliminate the service.

Chairman Snowe concluded by saying that the Commerce Committee will devote the next few months looking at the cost savings of eliminating the NOAA Corps and this issue will be a priority for the Committee at the beginning of the Second Session.

ACTING ASSISTANT SECRETARY GARCIA TESTIMONY CRITICAL OF NATURAL RESOURCES DAMAGE PROVISIONS OF HOUSE SUPERFUND LEGISLATION

Acting Assistant Secretary for Oceans and Atmosphere Terry Garcia testified on the Natural Resources Damage (NRD) provisions of HR 2727, The Superfund Acceleration, Fairness and Efficiency Act. The statement was provided in connection with the hearing convened on October 29th by the House Transportation and Infrastructure Subcommittee on Water Resources and Environment (Chairman Sherwood Boehlert, R-NY). Mr. Garcia testimony was presented on behalf of the primary Federal natural resource trustees: NOAA, Agriculture, and Interior. Mr. Garcia commended the Committee for improving the draft NRD title but "the Federal trustees are concerned that the changes…would not allow full restoration of injured resources and would encourage litigation." He said that NRD title "proposes statutory construction that will encourage litigation, delay restoration, and generate unnecessary transaction costs. If enacted, the NRD provisions would preclude effective and efficient restoration and deprive the American public of their natural resource legacy."

"Despite the progress evident in the most recent proposal to revise" the Superfund natural resource damage provisions "the Administration opposes this title in its current form and urges the Committee to adopt the Administration's proposal or to more fully incorporate the elements of that proposal in the Committee's draft."

DR. BAKER TESTIFIES AT HOUSE SUBCOMMITTEE HEARING ON INTERNATIONAL YEAR OF THE OCEAN

The House Fisheries Conservation, Wildlife and Oceans Subcommittee (Chairman James Saxton, R-NJ) held an October 30th hearing on the International Year of the Ocean. Dr. D. James Baker, Under Secretary for Oceans and Atmosphere, was invited to testify. NOAA has been designated as the lead federal agency for the U.S. Year of the Ocean activities (1998). Dr. Baker explained that NOAA has entered into a Joint Project Agreement with the Heinz Center for Science, Economics and the Environment to engage ocean stakeholders in planning for ocean-related events and activities to commemorate the year. The Under Secretary said a national campaign would be launched in December led by NOAA in coordination with other federal agencies. Working with the JASON Foundation and other partners, there will be host live interactive broadcasts from ocean research sites to schools and students in different regions. "This effort makes it possible for students thousands of miles away to participate in live underwater exploration and research—via underwater video cameras and real time communications with the on-site students and scientists."

ACTING ASSISTANT SECRETARY GARCIA VIGOROUSLY OPPOSES ATTEMPTS TO WEAKEN NOAA AND INTERIOR HYDROELECTRIC DAM RELICENSING ROLE

On October 30th, the Senate Energy and Natural Resources Subcommittee on Water and Power (Sen. John Kyl, R-AZ) held a hearing on hydropower relicensing. The Committee had received complaints from the hydropower industry that relicensing was costing too much and taking too long because of requirements such as fish prescriptions. The Acting Assistant Secretary for Oceans and Atmosphere Terry Garcia testified for NOAA. Members in attendance in addition to Chairman Kyl were Ben Nighthorse Campbell (R-CO), Larry Craig (R-ID), Slade Gorton (R-WA), and Daniel Akaka (D-HI). Most of the opening statements concerned the relicensing process, that it was overly protracted and costly, whether economic considerations were weighed with environmental considerations in granting a license, and whether the Federal Energy Regulatory Commission (FERC) had been effective in deciding a final balance of conditions and economics. Only Sen. Akaka's statement pointed to an environmental concern, the extinction of species because of changes in water systems.

The first panel had representatives from the utility industry, such as Niagara Mohawk, Tacoma Power and Idaho Power, and a hydropower reform group. All of these raised concerns about the mandatory conditioning pursuant to the Federal Power Act, especially with regard to fishways. Industry wanted the resource agencies' recommendations to be non-binding, instead of mandatory. They called for statutory changes to do this. American Rivers testified that studies show that FERC would be likely to reject one- to two-thirds of the resource agencies' recommendations if they are not mandatory. American Rivers also cited the economic benefits of

healthy rivers nationwide. A sportfishing representative also was on the first panel.

In the second panel, FERC reiterated its mandate to balance the cost of environmental protections with sound economies, and asked to have more authority to be the final arbiter. Department of Interior's Solicitor John Leshy clearly stated that this was an attack on environmental protection, and that the Department would oppose any weakening of its mandates. He reiterated that these are public resources, and that it was time to look at the environmental standards for the next 30-50 years. He stated that 133 of the 157 relicensings in the 1993 class were successfully done with mandatory conditions, so that was proof that the system was not broken. In the testimony and questions that followed, he stated that one-stop shopping on environmental protection is not the norm, and that it takes coordination between agencies.

Forest Service's Director of Lands Ellie Towns stated that fish are affected the most and benefit the most from hydropower conditions, and that they would oppose any weakening of mandates. Mr. Garcia reiterated that the agency would oppose any weakening of its mandates. He also stated that the link between environment and economic sustainability was a key principle of the Administration. He stated that NOAA, like FERC and Interior, wanted to advance the process improvements. Representatives from the Western Governors Association and Vermont Natural Resources organization emphasized the need for greater state participation, arbitration, and final control in the process.

In the questions that ensued, Sen. Craig asked if FERC had the expertise to be the final arbiter on fishways, and tried to characterize the issue as a Federal turf battle. FERC said it had complete expertise about fishways. He was challenged by the Attorney General and state representative said the states did instead. DOI's Leshy had a final word and said that there originally was, and still is, a need for the Federal resource agencies. This was mandated in the original Federal Power Act of 1920 and was still the case today. Interior stated that it does not "make-up" conditions without costs, and that the establishment of conditions were the result of an extensive process of consultation between applicant and regional staff. When asked about the environmental consequences (such as pollutants) of facilities that would be shut-down, Leshy said that these would be decided on a case by case basis, and that economic interests up and down the river would benefit from a proper decommissioning. Mr. Garcia stated that the agencies would continue to resolve questions such as this in a collaborative style, and that the Administration would work out improvements and administrative fixes with the Chairman of FERC. He cited one of these fixes as doing earlier, concurrent and collaborative relicensing applications along a river, instead of sequential relicensings.

Sen. Craig framed the situation with a statement that collectively we are not supporting a clean energy source, that the current policy will make it impossible to relicense dams, and thus, the region will be pushed to pursue hydrocarbons. He also stated that if the process is too hard, it is a hidden tax for the consumer. The agencies should cooperate and expedite relicensings to avoid this.

NOAA UPDATES HOUSE SUBCOMMITTEE ON EL NINO IMPLICATIONS FOR WATER MANAGERS

NOAA SENIOR OFFICIAL SAYS CURRENT EL NINO HAS HIGHEST SEA SURFACE TEMPERATURES IN 50 YEARS

The Assistant Administrator for Oceanic and Atmospheric Research, Dr. Elbert W. Friday, Jr., and the Director of the Climate Prediction Center Dr. Ants Leetma, testified on October 30th on the Water Management Implication of the El Nino/ Southern Oscillation before the House Resources Subcommittee on Water and Power (John Doolittle, R-CA). Dr. Friday said that NOAA data "indicate that very strong El Nino conditions continue in the eastern Pacific." Sea surface temperature anomalies exceeding 9 degrees F "are at the highest observed values in at least the last 50 years, exceeding even the 1982-83 (El Nino) event at this time."

Dr. Friday went to say that "this event is by far the strongest we have seen for this time of year…and experienced the most rapid sustained growth of any event of the record, from its initiation in spring through the past summer. It is both the rapid growth and absolute magnitude of this event which have raised legitimate concerns about adverse climate impacts, both in the U.S. and worldwide."

The areas at the highest risk for above normal precipitation include the Southern California coast, much of the Southwest extending into the southern Plains, and portions of the Gulf Coast and the Southeast.

USS MONITOR STABILIZATION AND PRESERVATION OVERSIGHT HEARING

The House Resources Subcommittee on Fisheries Conservation, Wildlife and Oceans (Chairman James Saxton , R-NJ) , held a November 5th hearing to hear testimony describing the physical condition of the wreck of the *USS Monitor*, to review the contents of the draft plan, and to provide a tentative schedule to complete of a peer review of the draft and delivery of a final plan early next summer. Testifying for NOAA was Capt. Evelyn Fields, Acting Deputy Assistant Administrator, National Ocean Service (NOS), NOAA. She was accompanied by Stephanie Thornton, Chief, Sanctuaries and Reserves Division, NOS/NOAA; and John Broadwater, Manager, *Monitor* National Marine Sanctuary.

Capt. Fields delivered a brief statement summarizing the challenges and limits NOAA has faced in developing the draft plan as required by the National Marine Sanctuaries Preservation Act. She provided an overview of the contents of the draft plan, summarized future resources and skills that would be needed to implement any preservation, recovery and conservation work at the wreck, highlighted some of the cooperative partnerships NOAA has developed with other federal agencies and the private sector to do survey work at the sanctuary, and detailed NOAA's tentative schedule to conduct a peer review of the draft by technical specialists such as engineers, archaeologists, marine salvage experts, etc., and to deliver a final plan to Congress in 1998. Capt. Fields' testimony was bolstered by a short slide presentation by Mr. Broadwater which discussed in greater detail the six phases of the draft

plan's recommended option for stabilization and partial recovery.

In general, Chairman Saxton, Reps. Walter Jones (R-NC) and Herb Bateman (R-VA) expressed strong interest in the *Monitor*, its condition, and in working with the subcommittee to address the challenges ahead. Rep. Bateman asked whether NOAA knew conclusively that the rate of deterioration of the wreck was accelerating. Mr. Broadwater replied in the affirmative based on NOAA's observations of the wreck and the surrounding inhospitable marine environment. Rep. Sam Farr (D-CA) probed whether the sanctuary program would have sufficient funding to implement any recovery plan based on current Sanctuary Program funding levels and asked whether NOAA was exploring alternatives such as public/private partnerships. Capt. Fields and Mr. Broadwater did confirm that the program is interested in establishing public private partnerships, such as with the Mariner's Museum in Newport News, VA which has already agreed to exhibit artifacts retrieved from the wreck. Capt. Fields did note that the National Historic Landmark status of the *Monitor* would require NOAA to adhere to federal historic preservation requirements which might limit opportunities for private sector participation in certain activities (e.g., salvage, artifact recovery, curatorship, etc.). No additional hearings are scheduled or expected. NOAA did pledge to keep the subcommittee informed as it works to complete the final plan.

HOUSE AGRICULTURAL COMMITTEE CHAIRMAN HOLDS ELK CREEK DAM FIELD HEARING—NOAA TESTIFIES

Rep. Robert Smith (R-OR), Chairman of the House Agriculture Committee, convened a November 13th hearing in Medford, OR which focused on the Elk Creek Dam in Jackson County in his district. Ms. Elizabeth Gaar, Acting Assistant Northwest Regional Administrator for Habitat Conservation, National Marine Fisheries Service (NMFS) , represented NOAA. In her statement, Ms. Gaar explained that NMFS "has been working with the Corps of Engineers for many years to resolve the fish passage problem at Elk Creek Dam, and since 1992 NMFS has maintained the position that dam removal is the only viable long-term solution to this problem." She explained that the area above the damsite provides a critical spawning habitat for threatened coho salmon. Ms. Gaar explained that construction on the dam was halted in 1987 by a Ninth Circuit Court injunction when the dam was only one-third complete. A fish diversion tunnel was built into the base of the partially complete dam to provide fish passage, but has proven to be ineffectual. A so-called "trap-and-haul" facility was initiated in 1992. Fish are trapped at the base of the dam and are loaded into trucks, hauled above the dam, and returned to the stream. Ms. Gaar said NMFS believes the trap-and-haul operation cannot improve salmon survival. She said NMFS supports the partial removal of the dam because this action "will eliminate all of these fish passage problems as well as restoring the historically productive coho and steelhead habitat in the dam and pool area."

LEGISLATION INTRODUCED

Rep. James Saxton (R-NJ), on Sept. 3rd, HR 2393 to approve a governing international fishery agreement between the United States and the People's Republic of China.

Sen. Dirk Kempthorne (R-IN), on Sept. 16th, S 1180 entitled the "Endangered Species Recovery Act of 1997".

Sen. Dirk Kempthorne (R-IN), on Sept. 16th, S 1181 entitled the "Endangered Species Habitat Protection Act of 1997".

Sen. Alfonse D'Amato (R-NY), on Sept. 16th, S 1179 entitled the "National Flood Insurance Reauthorization Act of 1997".

Sen. Olympia Snowe (R-ME), on Sept. 18th, S 1192 entitled the "North Atlantic Fisheries Resource Conservation Act".

Sen. Ernest Hollings (D-SC), on Sept. 24th, S 1213 entitled the "Oceans Act of 1997".

Rep. Sam Farr (D-CA), on Sept. 25th, HR 2547 entitled the "Oceans Act of 1997".

Sen. Lauch Faircloth (R-NC), on Sept. 25th, S 1219 entitled the "Pfiesteria Research Act of 1997".

Sen. Ted Stevens (R-AK), on Sept.. 25th, S 1221 entitled the "American Fisheries Act".

Sen. John Chafee (R-RI), on Sept. 25th, S 1222 entitled the "Estuary Habitat Restoration Partnership Act of 1997".

Rep. Walter Jones (R-NC), on Sept. 26th, H.R. 2565 entitled the "Pfiesteria Research Act of 1997".

Sen. Spencer Abraham (R-MI), on Sept. 26th, S 1226 entitled the "Department of Commerce Dismantling Act".

Rep. James Saxton (R-NJ), on October 7th, HR 2630 to designate the Mullica River-Great Bay National Estuarine Research Reserve as the Jacques Cousteau National Estuarine Research Reserve at Mullica River-Great Bay.

Rep. Ed Royce (R-CA), on October 9th, HR 2667 entitled "To Dismantle the Department of Commerce".

Rep. James Saxton (R-NJ), on October 9th, HR 2670 to amend the Federal Water Pollution Control Act to permit grants for the national estuary program to be used for the development and implementation of a comprehensive conservation and management plan, to reauthorize appropriations to carry out the program, and for other purposes.

Rep. Sherwood Boehlert (R-NY), on October 23rd, HR 2727 entitled the "Superfund Acceleration, Fairness, and Efficiency Act".

Rep. James Barcia (D-MI), on October 28th, HR 2750 entitled "Superfund Cleanup Acceleration and Liability Equity Act".

Rep. Jack Metcalf (R-WA), on October 31st, HR 2793 to authorize the Secretary of Transportation to issue a certificate of documentation with appropriate endorsement for employ-

ment in the coastwise trade and fisheries for the vessel FIERCE CONTENDER.

Rep. Vic Fazio (D-CA), on November 4th, HR 2801 to consolidate in a single independent agency in the executive branch the responsibilities regarding food safety, labeling, and inspection currently divided among several federal agencies.

Rep. Dan Burton (R-IN), on November 7th, HR 2883 to amend provisions of law enacted by the Government Performance and Results Act of 1993 to improve federal agency strategic plans and performance reports.

Rep. Wally Herger (R-CA), on November 7th, HR 2894 to amend the Endangered Species Act of 1973 to enable federal agencies responsible for the preservation of threatened species and endangered species to rescue and relocate members of any of those species that would be taken in the course of certain reconstruction, maintenance, or repair of federal or non-federal manmade flood control levees.

Rep. Richard Pombo (R-CA), on November 7th, HR 2911 to amend the Endangered Species Act of 1973 to improve the ability of individuals and local, state, and federal agencies to prevent natural flood disasters.

Sen. Richard Durbin (D-IL), on November 8th, S 1465 to consolidate in a single independent agency in the executive branch the responsibilities regarding food safety, labeling, and inspection currently divided among several federal agencies.

Sen. Olympia Snowe (R-ME), on November 8th, S. 1480 entitled "Harmful Algal Bloom Research and Control Act of 1997".

Rep. Thomas Davis (R-VA), on November 9th, HR 2987 to amend title 5, USC, to provide for appropriate overtime pay for National Weather Service forecasters performing essential services during severe weather events, and for other purposes.

Rep. Michael Oxley (R-OH), on November 9th, HR 3000 to amend the Comprehensive Environmental, Response, Compensation, and Liability Act of 1980.

Sen. Alfonso D'Amato (R-NY), on November 13th, S 1553 entitled the "Long Island Sound Preservation and Protection Act of 1997".

COMMENTS OR QUESTIONS:
PLEASE CONTACT--NOAA'S OFFICE OF LEGISLATIVE AFFAIRS
(202) 482-3638
FAX (202) 501-8016
EDITOR: HOWARD S. MARKS
INTERNET: *HOWARD.S.MARKS@NOAA.GOV*